

1984~85年

BAHRAIN

1984年~1985年にかけて25ヶ月間、中近東の国バーレーンでアルミ圧延工場建設プロジェクトに参加した。
コンピュータによる工事の進捗管理を担当した。

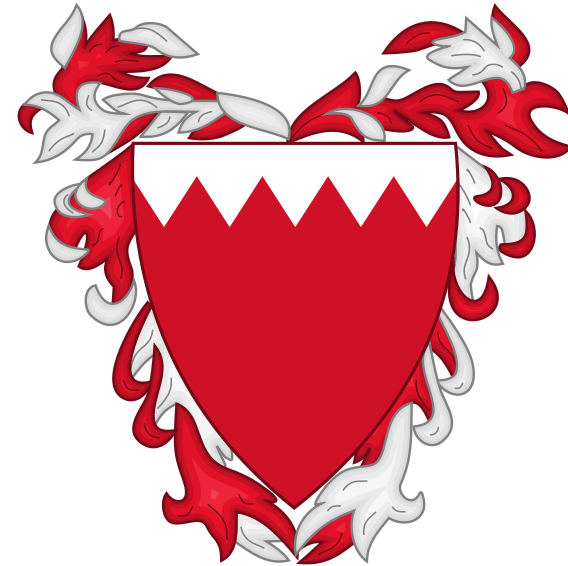
当時の資料、会議記録、生活、レクリエーション物資、etc を廃却することにした。一部デジタル化保存したうえで





国旗

国章



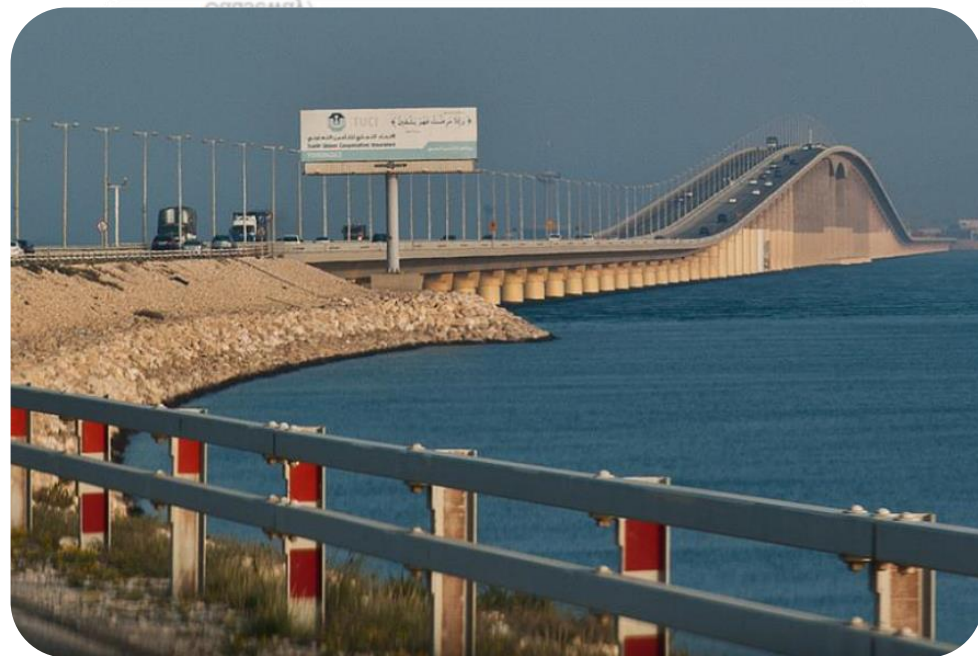


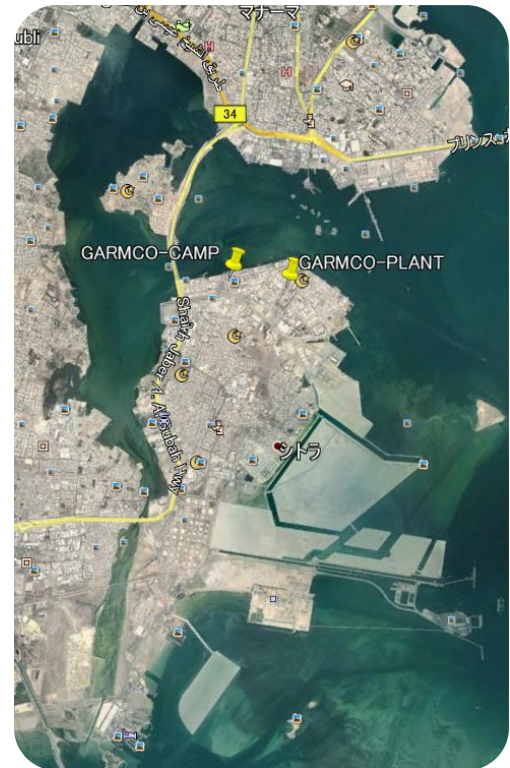
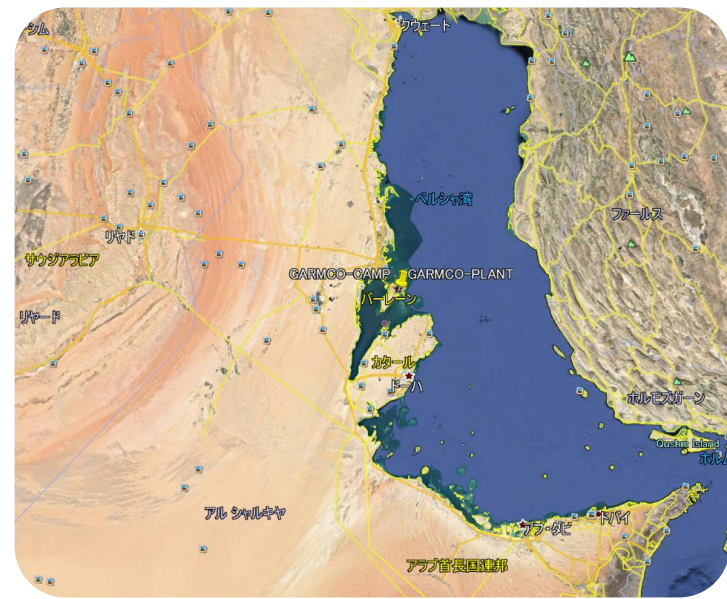
通貨はバーレーン・ディナール（BD）で、1米ドル =
0.376BDと対米ドル固定レートを採用している。

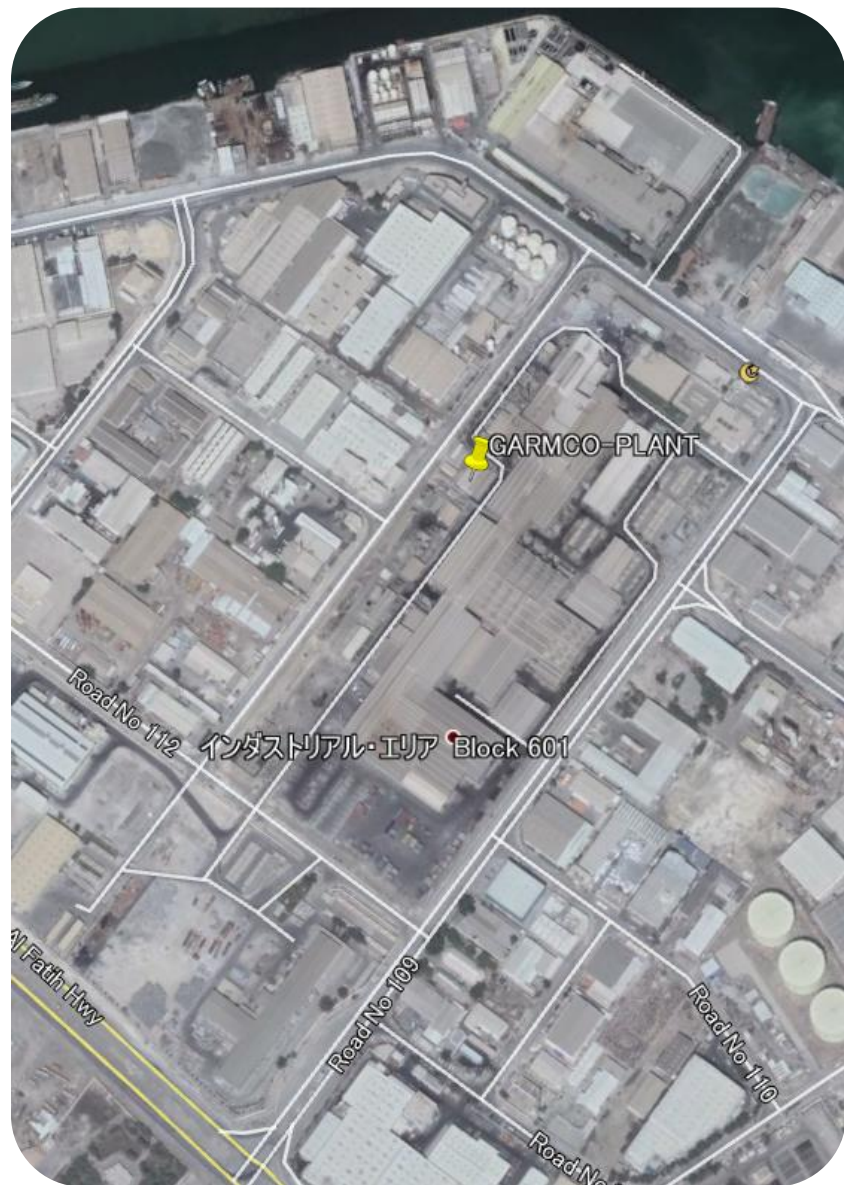
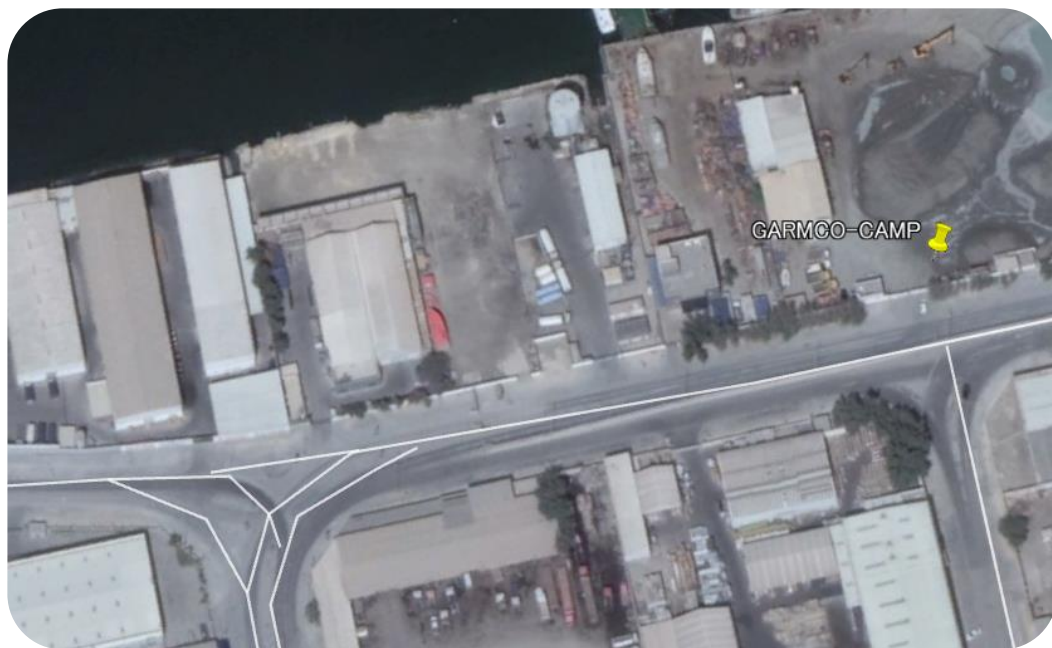
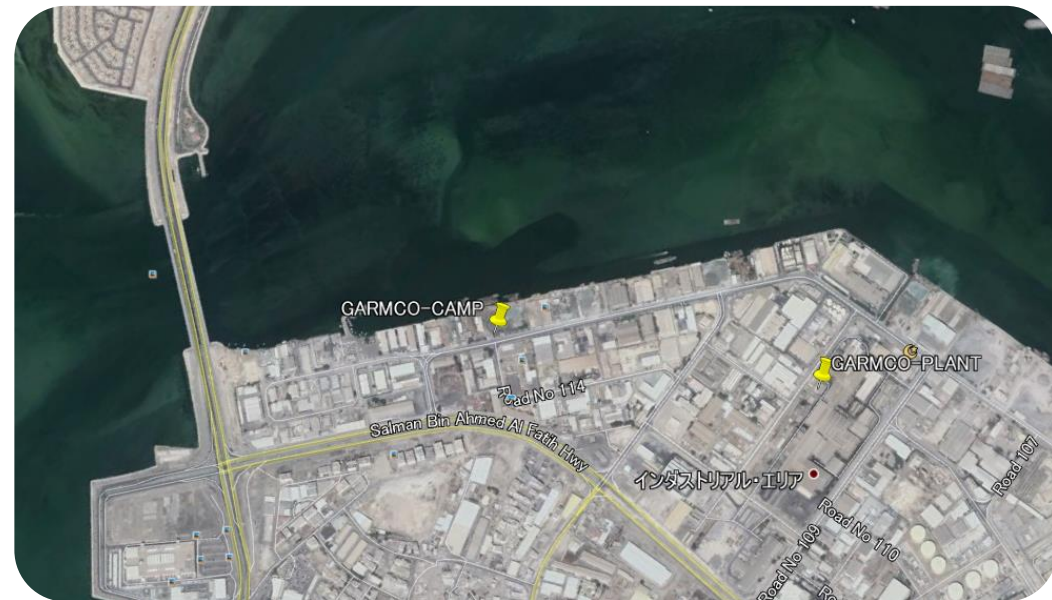
通貨はバーレーン・ディナール (BD) で、1米ドル = 0.376BDと対米ドル固定レートを採用している。



写真2. サウジアラビアとバーレーンを結ぶコーズウェイ (King Fahd Causeway)







1985.05.11

Main Sub Hot/冷体受電 (SA/0A)

UK TERMINAL TERMINATION

Hot Well 配線, cable duct, pip - coolant room

cold Roll coolant (panel)

Mill office - 3室, LAB, S.H.F, R.M 2F ceiling, 4 line cabling with

Yard R. 2 line compressor room, 1 line cold C/R, No. W.7 ... 5%

Compressor 7%

control valve: Raw water

No. 1. W.7. Cooling tower

(S.H.), A.N., Fern. A., Bathing, Fun. Area

crane

40201 Sa 2P. wire l.c., 30101 (30301) 22-32, 20101 - 4管理 (Roll grinder Base 18F)

5 calper Lining, K/E insp. 2%

30001; 2a Table Setting.

[Helonet] operation Cr.

Main sub

UKV Termination

cold a Emergency.

UKV. Trans formers. Found. W.

Cond't pipe, 2 oil cooler

Air Con 7% duct (Bong)

No. 2. W.7 duct, Piping support half

Hot Ek - callor for a wiring.

Panel Milligards (Pneumatic)

5月11日 ~ 16.

S.H.F. Air Blower Part, Main Splender, radiat tube Flange setting, Fan Motor 232

A.F. no. 1 { welding, start belt, duct inside, insulation

no. 2 { welding, insulation

Tension Leveler (chipping), Tension reel pad. padding, cut to length Foundation ch.

splitter H.F.

M.F. insulation Bond Welding, cover carriage, radiat centering, Pressure unit, Exhaust duct, oil unit and a grant

Gas central, Foundation ch. chipping, Fuel Paddling, No. W.7

Pump room No. 2, Pump coupling centering, industrial water line, drinking w. / domestic w., cooling tower, cooling centering

Yard Piping, olinc pipe, 13L. ovp Support, 23. Support 2, No. 3 Pipe Rack, Fire Fighting

9.10 a Area 2 设施, paint, Area 2 Pipe etc.

coating station

48g, 春王, 中? 去去!

B3 Table/oilpan

Hot/COLD

B1, B2 ... Motor Base & Insp., Entry Belt Ripper & centering, Flume duct a 4ft, side tremor a Base a setting, Scrap conv. in centering, H.I Roller table, Oil taller a Piping, Main motor a Grant, Fume hnd 92%

roll coolant roll Balance

Cold

Main Motor, Metal Centing, Flume duct a 4ft, Piping, No. 1 valve stand, No. 2 "

Roll Grinder, Base a Mounting, Small gr. chipping

Lighting, Mill off, LAB, Remelt 5/2 ... 1/2 2-3 4/2

Yard Rack, Annularing Area, utility - 23 24 ... 7/5 Bracket set

No. 1. W.7. Sag. chok, Instrument, Rubber, Scalper duct a 4ft, T. Area Blahet a Fabrication, Slitter line a 2a, Pot cover (scalper?), J.A Bracket a 4ft (Tension)

C/R acceptance manual,

Scalper

Turn-over, Column cent, cutter header assemble, Table insp, int'l unit, Pre-Tab Pipe etc

Table, K/E Meeting

1. Main Sustation 橋, 2. Hot, Cold, Coolant Room 4 (40), 3. Main sub oil tank 水の, 4. cold Fan Room ... Temp -> Permanent, 5. Hot air conduct a 34, 6. Hot, 7. W.T. No. 1. Elk. Don 1/11/2/37 -> (2), 8. Compressor, 9. Remelt 5/2, 10. S.H.F. 1/2 Control, 11. Mill Ind. scrap Handling system a 1/2, 12. chane a Unchi' corigion 4 2/3, 13. Schedule a 1/2 ... 特以同種, 14. constant pipe, 15. scalper chip Hopper

1985.05.18

- ① Mission Report (23)
- ② 1st. - 1st list (23)
- ③ Schedule (6/17) (23)

5/18 ~

S.H.F. Radiant tube, ^{France 133 (17)}
 Rack Support ^{Buffle plate}
 — Photo a. H.H. ^{Max cylinder}

A-F STAC-BOLT (No. 2)
 INSULATOR → (5/18) ^{over plate (No. 1)}
 Pudding ^{cooling duct}

Low level a 1315 ^{ing anchor}
 chipping a Pudding (F)
 Steam heat a 630

51701 ^{Exp. Insp.}
 @ Shitter preparation (Found)

M.F. Cover carriage ^{chipping}
 centring

H.F. Filter dual a setting
 Exhaust duct a 110

Control (Not Fav. duct
 No. 2 GA-Filber

Nal. w. T. NOH. ^{4.5m}
 cooling pump coupling cont.

Compressor room ^{Industrial water}
 domestic water

Repair work
 cont. 5.0 - Found. ch. (5/18)

Yard piping
 ③ 10 0.5P-Ripe Rough Set.

③ 7.0-P Support. Pipe a Rough set
 ③ Under ground pipe water 6"

Area 2 cr. h. (domestic w.)

Fire Lighting
 Area 7. Pressure test

9.10.14. ^{Back Fall}
 Temp Test

Area 6. ^{Temp Piping setting}
 2. → Termination

Hot/COLD

- B2 Table Head a setting.
- Entry Belt Ripper ^{size 179}
- Sided tremma a Base a Cont.

- Scrap Conv. Cont. No. 3 ^{to 2}
- Mill F. ^{Frame duct}
- Trench cable

- Hi. Toller Table Gear ch. ^{Inst. E}
- Oil celler a/pipe ^(water)
- Blower

- No. 3 valve stand ^{RA}
- Coolant a 15 3.0. ^{Temp}
- Exhaust pipe a 1000. ^{centring}

- Main Motor a Centring a Insp. ^{Piping}
- Stack a 0-7% setting ^{oil shield a grant ill. (E)}
- Mill to 5P a Piping (From oil cell)

- Small sil
- R. G. - large temp. centring.
- Main-Sub Anchor grant

- H. 20 R.M. ~ M.S. ^{Panel}
- Hot ^{Roller}
- Panel - mill. roll coolant.
- acont - oil celler

- OLD
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

- Mill off/R.M/LAB
- Mill off/R.M/LAB
- Mill off/R.M/LAB

FINISHING YARD & TAN LEV.
 STRAIGHT LIGHTING.

51401 ... ^{Blaket of top}
 51701 ^{WIRING}

SCALPOR ^{cutting Head Assembling}
 Turn over Tab - grant (F)

(crump Table) ^{EXIT TABLE}
 Anchor grant (F)

Turbtable ^{油圧機}
 cushion ^{Forming}

Entry Td. Fav Anchor grant
 Turtable ^{220 a 2.5}

1. EL/Room 2.1

2. Main-Sub 2.5

3. Air-Con a 1.7

4. Cold Mill

5. Hot CR Trans. Fence.

6. " " termination duct

7. " Motor room

8. No. 1 W.T. FAN Not yet

9. Pressure

10. Cold Mill

11. No. 1 W.T.

- ① REP 1, REP 12, REP 13, REP 14
- COMMENTS → MESSAGE 追加
- ② DESCRIPTION は 使用 追加 したか?

RG ... 今週中: schedule.

Hot ... Piping: System

Cold M. ... 2.1m

A.F. ... Rail a behind.

T. Lev. - Level

CRASE ... Ambicorizon

SPAIR - Parts

Branch - Mark a 1.7

Hot

Amch. grant

Yard Rad. 13 ~ 0.1P.

Rem. SCALP. REP. CAB

S.H.F. 1

A.N. CR Panel 2.5

F.S. Blaket FAB

TEN LEV. a 1.7

51701 Head for 1.7

Air-con duct. ?

SCALPOR - piping.

Entry

油圧機 piping

51701 slitting panel a 1.7

cut to length panel 1.7

1985.06.08

6A8B

- S.H.F.
 - Bottom Insulation
 - Air-Duct setting
 - Bottom plate setting (6/11)
 - 1st floor or 2nd
 - Main piping (Hydraulic)
 - N-ars piping NG
- A.F.
 - Walk
 - 1. ~~1st~~ way setting, welding partition plate, Hand rail welding
 - Radiant tube 1st setting
 - 2. Start Bolt welding 16%
 - charging car rail roof fan & 1st partition plate setting
- Tel.
 - Stanchion Anchor grant
 - trimming unit & 1st
 - tension reel temp. centering
 - Power roller
 - ump. Mounting
 - payoff reel
- cut to length
- chipping (Compressor 2)
- Melt. F.
 - exhaust dust filter (6/10)
 - Bottom
 - Molding inside
 - 1st setting
 - holding side
 - Exhaust dust & H. 1st. coating
 - welding 1st
- Gas. con
 - To FC 1/2
 - No. 2 Bottom
 - No. 1 Filter
 - 1st Filter
 - Bottom hopper
- No. 1 W.T.
 - 1st Piping
 - Furnishery. Work
 - coating tank
 - Pump drum piping

Costing Station

- Boiler Room
 - Diesel generator
 - No. 2 Boiler
- Yard Piping.
 - 1. steam line 改送: 1st 2nd 3rd
 - 2. piping
 - 3. 23 1st 1st 1st welding 21 P.I. 6 inch
- Under ground
 - Area 2 Natural Gas-line compressed Air-line
 - " pvc line
 - Area 40 Tank (water) 2nd 1st
 - Fire-fighting horse coal
 - Supporta 1st
 - Welding 2nd 1st
 - 1st tank & 1st a Pump padding
 - Hot/Cold Mtr. Anchor grant
- Hot mill
 - 1st coal car Repair
 - 1st scrap conv. Conv. 1st
 - stripper Motor centering
 - renew smooth setting 1st
 - 1st 1st & Anchor gr
 - cooler installat.
 - coolant pump centering
 - 1st 1st 1st Motor coolant
 - No. 4. No. 5 valve stand
 - oil mist No. 2. No. 4. a welding
 - 1st 1st 1st 1st 1st
 - 2nd. 1st a centering Insp.

1/25 : Slab Supply 45

1985.10.31

P.A Provisional Acceptant 工事納期 (暫定受諾)

Flushing 20

- oil mist pip
- No. 1 valve stand
- Water piping.
- Roll Grinder
- stock 1st (L. 5 1/2)
- coolant con piping
- Hot 1st 2200 12
- 6.5 282 422
- cold 1st 522 15 592
- 26 263 265
- * 1st 1st 1st (9%)
- 22+9
- Cooler 1st
- 1st / cut / (rot) LAB / R. 1st
- Yard Reel. Finnish Yard
- I 1st 1st I line 1st
- EARTHING
- Street lighting Air-dryer
- compressor room
- No. 2 W.T.
- scalper pannel 3rd
- cabling 1st
- S.H.F. 1st 1st 1st piping
- F. Area pannel 1st 1st fixing (1st)
- Temp. NO. 2 line 1st 1st
- Pushpot

- Scalper damage ch. duct 1st
- (Am tune-over table
- Entry Table: leveling.
- EXIT Table
- Compressor 1st (6/10)
- dryer
- automation switch
- 1st on-site training opening.
- 1st common training
- (M 11)
- (El 14)
- (Roll 14)
- 1st Meeting.
- 1. 100 - sh. consist
- 2. Main - Sub Air - Con
- 3. Mill office a 1st
- 4. cold 1st schedule
- 5. W.T. Commissioning sch.
- 6. 1st a Con. sch. Realistic
- 7. scalper 1st. Revised sch
- 8. Roll, Conductor sch.
- 9. Piping / Flushing Sch.
- 10. Cold Mill 1st 1st. (2002)
- 11. A.F. 1st
- 12. Slitter 1st 1st 1st
- 13. cut to 10.0 (Rev. sch)
- 14. (Screw Roll Forming)
- 15. Anch-Con - Rev. 30 1st 20 1st
- 16. Spare parts
- Table 1st + 1st pipe 2000 1st

- 17. No.2 W.T. - Water Tank cracks
- 18. S.H.F Door Damage
- 19. Cover carriage sketch.
- 20.

1985.06.15

- 6/15 ~
- 6/8.
- 1.
- 2. 電機 Schedule
- 3. Cold Mill a
- 4. Rowlett Area
- 5. Cover carriage access
- 6. Gas Control a 電機
- 7. Scalper 減速機
- 8. Roll grinder (pit cover)
- 9. Roll grinder a 2nd 2/2
- 10. Jamit 200 132X Hot a Fan room
Cold
Furn. a mineral.
- 11. Cold mill pulpit 20 X 20
- 12. Amending Tarnasa Repair
- 13. Finishing Yard Revised Schedule H.F.
- 14. Arch conigion
- 15. Cooling tower Base a 1/2 2 1/2
- 16. Rowlett
- 17. (電機) Hot/cold
com. schedule

S.H.F

Bottom Inner plate
Roof Top a Setting (6/17)
Limit Sw. a preparation. painting
N-Gas piping
Entry valve stand
Exhaust duct Prep

A.F

1. Radiant tube Flange
Sott & Weld.
1/2" Rail.
2. Radiant tube 1/2" 5
charging car rail temp Comb
Inner plate (door)

TEN. Lw

- Leveling unit
- Tension reel bed a P. centering
- Pinch roller a P. centering
- SL/SH Leveler a T. centering.

cut to 1/2 Tension reel unit 50%

- chipping & padding
- Payotreal a painting

M.F

cover carriage
Exhaust duct

Gas.C No. Middle Hopper No.2 Gas filter
No.1 No.2 1/2 Hopper
1/2 Coating setting.

Coat.S

Painting
Foundation check (1/16)

Boiler Room

No.1 W.T. Support. Valve a Co.

Sand Blast 200 57E.

48

N. Gas chipping.

Yard. Piping.

- steam Main 2/2 support 2
- 23 1/2 Piping (F) XrayD. Pre-test a 1/2 2/2 2/2
- Under ground (F) XrayPre-test 2/2 2/2 2/2
- PVC line 1/2 2/2 2/2
- Pure Water line 1/2 2/2 2/2
- Support a setting
- 28 1/2 2/2 2/2 1/2 2/2
- Area to Support 1/2 2/2

Cold:

- Senser limit Sw. 1/2 2/2 2/2
- Coolant Floor with cover
- No.5 Valve stands 1/2 2/2
- air a piping
- Cooler 1/2 1/2 1/2 1/2

RG

Motor shipping } Sg. d. (1/2 2/2)

Oil tank.

Fire-Fighting.

- Area 2: N
- 1/2 piping 1/2 2/2
- 1/2 2/2

Hot

- Mill Hopper a setting
- Sclap Conv.
- Mill 1/2 1/2 2/2 2/2
- share a coupling setting.
- reamer / share roller bed

Ann-con

- Roller / Tanker / LAR / R/m /
- Yard Rack 1/2 Line Rack 2/2
- ITV, EARTHING, STREET LIGHTING
- Fence 2m Prep
- Isolms cable 1/2 2/2
- No.1 W.T. 1/2 2/2 2/2 2/2
- R/m. 1/2 2/2 2/2 2/2

SCALPER

Piping

- Cooler
- Hot 1/2 1/2 1/2 1/2 1/2 1/2
- share 1/2 1/2 1/2
- B.E. Bulk pumper
- No.1 No.2 Balve stand
- coolant Room coolant 1/2 2/2

Founders Area. 1/2 2/2

picking 50 2/2
Flashing

- ITB. 1/2 2/2
- C MD 1/2 2/2
- HMD 1/2 2/2
- 1/2 2/2

1/2 2/2 2/2

6/22 ~

1985.06.22

- S.H.F. • Start Insp.
- sensor limit 500 caton
 - gas piping ceiling
 - thru roadway

- A.V. 1. Inside rail a centering.
- Tray stand centering
 - rail a patting
 - changing car rail
 - start (Nov. Assemble)
 - back (Nov. 4/20)

- ten • Paj off real
- Final Centering

- slit • Koms Skitting
- payot real a cent.

- cut. • Paddling
- upho unpach
 - 50. Month

- cover carrier
- 20chumst
 - cast
 - 20chumst
 - 20chumst
 - 20chumst

- conting. • under grant
- chipachy Paddling
 - unpachy

- S.C. No. 2 20chopper
- no. 2 20chopper
 - 20chopper
 - 20chopper

- Boiler • under grant
- 100 setting

- No. 1 20chopper
- 20chopper

No Gas chipachy / Paddling

- no. 100 unpachy
- 100 Support setting

Yard Piping

- steam line 200 30 Fini.
- Under ground poc
- Area 40 200 ± 40

Maintenance shop

- 20 200 200
- piping start

oil Tank

- Xray
- old water line. ch.
- natural gas 4/20 piping

Hot. Area 6 piping

- No. 1. Nov. 2 Welding
- No. 2. Cool 200
- Valve setting F.

Bracket

- Main Floor cleanj.
- Mill 20. Camera Somet.
- Coolant room Pendery
- No. 4. Baln. had Welding
- Current room a piping
- line, camera a Preparation

Piping (all Finish)

- 200
- 200
- 200
- 200
- 200

COLD Floor plate setting

- Spool Hanger
- Mill spindle a 200

Main Motor a 200

- Current room pump
- oil seller Pump a Ins.

Sequence of 6/27

R.G. Large Test

- Hot/cold 200 200

Hot 200 200

- Hot 200 200
- Termination local
- Ruckpit
- SLV a Lock go a Setting
- 200 200 16/20
- 200 200 200

cold 200 200

- 200 200
- termination
- 200 200
- Consist pipe 200
- Air-Con.

Rack Bracket

- 200 200
- cut to length 200
- Ten-lav. 200

Finishing Area

- 200 200

Scalper

- Turbine a Repair
- Puct a
- OP. Test

Flushing

- 200 200
- Roll Banner
- 200 200

Roll F. 200

- 200 200

Yard Rack

- 200 200
- 200 200

EAETHING

- 200 200
- 200 200
- 200 200

R.H. Area

- 200 200
- 200 200

S.H.F. 200

- 200 200
- 200 200

roll Framing 200

- 200 200

Hot 200 200

- 200 200
- 200 200
- 200 200

Air-Compressor

- 200 200
- 200 200

Hot/cold Flushing

- 200 200
- 200 200

Fire Truck/Load Test

- 200 200
- 200 200

duct expansion

- 200 200

30.5% - 50% 7/30

K/E. coordination meeting (30-JUN-85)

1. 7/4. Emergency. (Main SLD)
2. Cold ER. Air-con 1%
3. Hot ER. Air-con 2%
4. OTTOR been schedule
5. Hot pulser roof.
6. cover carriage & across formally chimney.
7. Cable trench
8. casting station Progress ok
9. Melting Furnace Piping
10. Annealing charging car. too late
11. Roll grinder seq. ch.
12. Aspart product
13. Flushing. : Revised schedule
14. Finishing Yard Revised ch.
15. Remelt. Covers & up. 1/15/85
16. D.C. Cable Installation
17. Fire alarm 8月中旬可以修好
18. Heating yard rail.
19. Mill (12). Part cover 11/15/85 on
20. Paving : 8月中旬

- S.H.F
- A.F - charging car rail A.grant
 - Poor a. Assembling
 - No.2. insulation
 - Piping
- T. Lav. - Floor, Flatner A.grant
 slit - No.2 Pond roll
- cut. - Entry
 - Leveler 12W
 - FL/P.O. Rail.
- R.F - chipping / Padding (Forming unit)
- M.F - Exh. duct Welding.
 - Piping 67. P.
 - 12" 1440 ft. (H 242 ft.)
- H.F
- G. Con. Gas duct

salpeter sag check (7/11)

安全10/10-W. (6/6) 指摘事項

1. Fire alarm 修好. 到全里修的.
2. Grass Bowls.
3. Pump R - 5/2 - a shut.
4. 安全 Belt 保護工作
5. 電氣安全 工作.

Boiler grant piping 7/10/85

17月13日

- S.H.F
- Nozzle plate Bottom F. ^{* piping} ~~Front~~ stack off at.
 - Entry duct
 - () 13ft.
 - Piping. Combustion pipe bo- comp Air
 - 西邊 2" Flushing entry side (E)
- A.F
- Floor
1. Combustion nozzle plate a setting waste gas duct
 2. N-GAS piping No.2. Bottom plate
- charging car
- Ten. lev. Flatner Flying shear F. centering
 valve stand Sett
 Entry side equipment pad.
- slit Ten Rad Flatner F. centering
 Emporary centering grant.
- Roll. F. padding (last w. 64 ft)
- cut to length Entry Coil car 12
 Pay off reel a leveler
- M.F. Exhaust duct leveler
 12" 天9部. (E) 11ft.
 Hot 天9部 2.00ft
 90度路.
- piping. M.F. 102 P/554
- Hydraulic piping.
- Melting Finishing work.
- C.S. Mold Centering Insp. (7/13)
 Fan " grant, Fan duct
 Fan duct. (8/11)
 30ft piping.
- No.1. W. Treatment (改) 新站.
 No.2 "

- Gas-Con Gas Cooler Back Filter Finishing
- N-Gas grant. (7/16/85)
 5ft. grant a Insp. 15
 Area 40.
- Yard piping Area 40.
- 2ft
 - 31ft 12ft 12ft 11ft 10ft 10ft
 - Five-Fighting hose reel Alina Mill yard
 - Blue slab prep area 22ft Support a part
 - (4ft) 12ft a setting
 - Test X Ray. N-Gas line N-Gas System 11ft 11ft 11ft 11ft
 - N-Gas line. Insp. 11ft 11ft 11ft 11ft
 - Comp. Air line. 11ft 11ft 11ft 11ft
 - Air line. 11ft 11ft 11ft 11ft
 - App Blaw sleeper. wider line 11ft 11ft 11ft 11ft
 - drinking-line 15ft 15ft 15ft 15ft
 - Five-Fighting Area 6.
 - 3用終 Insp. (E). Back roll
 - Area 22 scrap yard.
 - Area 10- chamber setting
 - Finishing work Prep Area 12.
 - Hot/cold Main-Motion Coupling cooler Scratch grease 11ft
 - 17ft 17ft 17ft 17ft
 - Coal room Floor
 - Full (E) Bedwrap. conveyor. F.W
 - Accumulator
 - Ext coil M. Grant
 - Oil cellar
 - Piping.
 - Coating

12ft ramp 12ft 12ft 12ft

street lighting 24V cab.

- No. 5 pinch roller Insp. 7/29
- Tension reel out Board
- Leveler anchor ground
- 24V valve st. piping.

slid • Tension reel out Board
• Tension Bridle Insp. 7/27
out of band

Flatiron Beddon Anchor ground
• AMB Coal car centering
• Leveler. 7/29
• Leveler. and 7/29

Roll Former Faying sh. 7/29 Insp.
• Entry table con
• Forming unit unpacking.
• Base. padding 5/24

Melting Furnace

Gas-Con stank - Duct

- Grass cooler back Filter 7/25
- Air. water Piping 7/27
- Insulation start

Boiler room 7/27 ~ 7/29 E. Work 7/27

casting st. 7/27 & 7/29 setting.

Hydraulic piping 7/29

* Melting / Holding commissioning sh. 7/29

Yard Piping

- Area 40 3/24, 7/27, 7/29
- Air Beedel. 7/29 setting.

• M 24 7/24 7/27 (F)

• Fire Fighting: Hose reel. 7/27
上策 16 + 77 (2%) 9'

• Support a Setting L. 25 (F) 7/29
• Test / X.RAY C-AIR
shab prep. Yard

• Indirect cooling water

• SMO/CO/KE line.

• Casodic Protection.

• Recovery Pump

• Natural Gas 7/27 7/29 Insp.
skud to N2 purge (F)
YARD 7/29

Fire Fighting

• Under ground pip. F.W. (F) 7/27

• Fire Pump Piping. 7/27

• Hot mill 7/27 & 7/29 ... Tank.

• Fire pump 7/29 test.

Hot/cold E/Room.

• Telar ... Air-Con

• Telar ... pulpit support.

• Net Fund Electrical 7/27

• spool transfer & cable comparison

• Telar. pulpit support setting

• Net Fund

• 7/27 7/29

Air-Con 7/28 7/29

Flushing

scalper Turntable
clusher cabin

oil duplication. oil mist mist 7/27

Hot push up
valve st. 2/2 F 2/27
Lno. 2/2 S 7/28
Main. M " F

1985.07.27

Flushing

Push up
roll Balance
Auxiliary
No. 6 valve stand.
Lubrication.
Oil mist.
Crease.

Soft check

Hot 7/27 7/29
• Auxiliary screw M
• M. pic. pulpit. sh.
• Computer CRT setting
Soft Loading.
• Main motor

cold 7/27 7/29
• 7/27 check (F) sensor Interface

• pay off reel 7/27 (F) 7/29

• Computer Soft loading

computer 7/27 7/29

Termination

Hot Adjust

7/20

7/27. per M. 55 7/27. 240 60%

7/27. System loading start.

Hot 90%
cold ... pre-test check

7/27 K/E coordinator Meeting.

1. M.H.F. 7/27 ~ DRYING.
2. Casting station 外部 PAINT.
3. Casting st. Panel a 位置
4. Scalper Gear Box E 7/27
5. S.H.F. 7/27 a spec, 7/29 上部 Proc.
6. Hot mill Flushing. Revised sch.
7. Cold Revised schedule
8. A.F. 7/27 7/29?
9. O.V.H. Draining crane a 位置
10. Ten Lev. 7/27 7/29 F. YARD schedule.
11. Roll Former.
12. IP-55
13. Natural Gas Fence 7/27 7/29
14. Convension Equipment
15. Hot mill sprindle 7/27 7/29
16. (Backup Roll a 7/27 7/29)

7/27 7/29

8月3日 Natural Gas 7/27 7/29

cut Power 100% cab
Pip.

R.F. Cab. Pip.

R.M. Area - 2入4出 1/2

Degassing Cable cover
Cast Locable SW
Glass cover 5.17.04

EM. Gen. - NLT 5/17

Recov. Pump 1/2

A. Area No. 1 5/2 7/17
No. 2 low

charging car front 1/2 to 1/3

A.F. Recov. pump
R.C. Fan

LAB: 1/2

Lighting: F. area 5/17
Coal Yard 8/19
Mill Yard 8/22

Em. lighting Remelt Area 5/17
Slab H 5/17
Slab pre. mat.

Shutter
lower water cooler

shipping 1/2
yard High Bay lighting

Recovery pump?

Fire Pump 1/2
S.H.

Area 10.

Boiler room

Screw conveyor cover
No. 1 W. Treatment Fire Pump centering
Band saw unpacking
Metal separator (tech)

Pulp pit

1/20 ~ LAB. piping

Hot com.

1/2000 cooler
kald wrapper
coolant
Roll

8/22 9:00 ~ S.H.F. drying 2入4出

8/21日 午後 2A時 15分
外 59°C

8/24日 ~ あと 69日

1. Hot coolant Fire pro. 8/4

8/25 AM Test 8/25 PM Hot Run

S.H.F. Slap 2入. Repair work
robot 1入

A.F. Punch list Work (Poor weight guide)

No. 2 piping NG 8/29
cooling stand

Tem
Scrap car rail centering
Assembly setting
guide table anchor grant

S.L.I. Env. unit centering Insp
8/26 the pre-die out Band Bearing
8/27 SQ: loop table setting
8/27 ~ piping 2入

電気
1/2 ~ LAB 電気工事 (1/24)
EMERGENCY Lighting 5/17
Street lighting Anchor Bolt Prep. Pole erection prep
oil tank 8/20 ~ SQ

Paging

Jacky Pump

Flushing
COLO EPC, Push up

8/22 ~ Maintenance
Foundation check.

Band saw?

cut to length
Entry coil car
Spool conveyor centering anchor grant
shear side guide

R.F. piping 8/20 ~
Entry table Insp. OK. Anchor grant
Filer rail centering

電気

Tan Lev.

電気
SQ (8/20)
cut to length
cabling (F)

S.L.I. Con. (5/17) pre-check prep
8/21 ~ SQ

R.F. forming
cab con.

oil tank ... Seq. (C)
A.F. ... No. 2 SQ 1/2
Recov. Pump. Pre-ch.

cathodic Protection

9月7日(土) ~ あと55日

- grant. ④ 本〜金週切
- 9/10 ~ Maintenance Yard. (④)
- LAB (江崎)

Area-10

- Degassing piping
- Screw conveyor cover
- Dress : Metal separator
- Bandsaw grant ②③

• Hot E/R. Hapon PIPING.

[9/5日]

- 机上の整理
- Hotの圧延再開 9/5日 × 残工事 9/7 再check
- Neck : Fire Protection Deluge

Annealing F. drying zone

[Leak test]

予備. ②③④. 1W.

- 10:30 ~ S.H.F. H. Mill Final Insp.
- 9/8 Hot mill 圧延再開予定
- Regular Maint. Procedure.

S.H.F 再点火

- A.F. • Punch list work rail stopper grant
- Anchor grant
- Cooling stand A.g. (Leak test)
- Ten Lev. • Out Box Bearing Loading grant
- G.C Motor
- FL/shi. grant
- Refractor well T.C.
- Shi • Anchor grant.
- Piping (2ヶ所)

Cut. L

- Coal car carting.
- " " rail Form
- shield A.g
- Roof Table 改造
- sh side guide F.c
- Piping/Welding 9割以上終了.

- R.F. • Pylon lifter chain saw c.
- Forming unit Work side
- Hydraulic unit.

70

Band saw have grain cylinder A.F. Peck cross Hand rail. (④) (Duct) 9/7日

- 電気 9/7 Motor R. check
- T. Lev Local c.
- Sh " " Rits ②③
- Out ②/3 c. Local 9/10 ②③
- R.F ②/3 c. Local PIP.

- Area-10. ②③
- ②③ Degassing piping. ②③
- ②③ Dressing & Filter piping.
- Band saw : Re-check 9/10 PIPING ②
- ② Casting : Flue lining (9/10 ~ 7) 9/10
- (②③) Remelt shop ②

Remelt Area

- Degassing ②③ 9/10 ②③
- Dress PIP Prop.
- Melting Pip ②③
- Band saw cover.
- No. 2. Ann F. 9/10 No. 2 ②③
- charging car ②③
- Recovery pump 10:00 ~ 11:00

A.F. ②③

- High Bay lighting 9/7 (F. area) → ②③
- Hot celler Em. lighting ②③
- ②③ ②③
- ②③

- Hot celler Em. lighting ②③
- ②③
- ②③
- Out door lighting ②③
- ②③

Paging : Speaker ②③

- Street lighting Pole ②③
- ITV. Terminal Box ②③
- Water pump

Remelt Area Put cover

- wave scale
- Truck Scale
- Crane ②③ : Repair ②③

- 9/10 ~ 10/10 crane rail. Welding.
- cut to length line.
- * ②③
- * ②③

- E. Coordinating Meeting.
- 1. GATE Complex.
- 4. Fence : Safety transformer
- 5. Remelt office : Air-Con
- 6. Labo trench
- 7. Area 10 trench Remelt LT
- 8. Parking Area.

- * ②③ ②③ Inspection 17:00 ②③
- * Hot Final Inspection.
- ① Roller Table ②③
- ② ②③ Fire-Partition ②③
- ③
- ④ Floor concrete.
- ⑤ Fire. Main deluge. ②③ deluge/detection line. Hot ②③

Rock a Numbering

o Maint. Yard
Crane Load Insp. 未 (9/4)

71

< Fin. Yard Post PIPING >

- cable duct / nozzle 方向修正
- Cold Inspection
- ① Steel door : Partition Repair
- ② cable tray
- ③ lighting
- ④ embed steel
- ⑤ Non slip coating

- KE 指摘事項
- 1. Worker workmanship
 - 2. schedule 出来ていない
 - 3. Safety
 - 4. SV 破
 - 5. Isola 工事 足場 足板
 - 6. Comm. 無

- ① 各課 12. 毎日 joint patrol
- ② 16:00 ~ 16:15
- ③ Mgr 安全点検区域
- ④ 足場
- ⑤ 金庫掃除
- ⑥ 巡回

- Maintenance Shop
- Anchor grant (B Type)
 - Area - 40 埋 (新津田)

Function Box

	TUL	SLL	CTL
仮組			本行
1072			"
草棚	9/11	9/16	"
サト			瀬田
IT7713			"
1141 内塔			"
1141 (P+I)			"
手摺	9/4	9/15	9/20
32 主			本行
脱脂			手
西器			"
中和			"
7721			"

- 9/12日
- Hot a Debruge System
 - celler Alarm System
 - 8時: Inspection
 - 10時: 圧送 27-1
 - L-4, L-25 消火器 (dry Powder, 5
Halon
Hydrant 1
Hose 3)
 - 圧送 内塔
 - 11:30 ~ 17:00 巡回
 - celler 内 2 次 5 回 1 日 150

⑨ Remelt Area drying 9/12
a Schedule

14-sep
K/E Meeting

9/14 ~ あと 48日

1. Maintenance schedule
2. Rolling Data sheet
3. 圧送の開始 予定
4. Cold Mill furnishing Metal
5. Cold: Bridle reel SW pay off
6. Load a Test cover change 17/sep 17/sep 17/sep
roper, light.
7. Safety practice
8. Hot mill trench
9. Remelt a comm. schedule.
10. Cold mill.

- coolant 11.6 x (A)
- cellar

Repairing procedure. Fiding

- ① cover change welding
- " " weight test (class 45)
- charging basket 27-1
- Melting F. welding
- ② Back filter setting 17日
- ③ Dross duct
- ④ Band saw control panel
- 1 " duct setting
- ⑤ Filter
- A. water piping. 9/14 ⑥

- A.F. 9/15. Pre-check
- cooling stand Insp.
- Ten. Bridle roll / Forming / grant. Leveler, notch Paduak Def. Roll cent / Insp.
- SLI Ent/EXT Frank coil car rail. Air PIPING

- Maint. shop
- Transfer car } shipping
 - gelatine shear } Paddling
 - chiller
 - lathe setting (E)
- cut
- Scrap car Base grant 17/sep.
 - roof table Entry side. set
 - Filter
 - Piping.

- R-Forming
- Poles 27-1 Rail / table guide
 - " coil car rail. Base grant.
 - Piping Prep.
 - Piping 17/sep ~ (番号)

Tracks / scale. / Wave schedule

1985.10.31

P.A Provisional Acceptant

工事納期 (暫定受諾)

電気
Ten/Ski
Motor pre-che (see ten.c)
Rotation ch
R.F
Wamu Scale
Remelt Degassing SQ
Area
Band saw con.
Lighting
Hot M/R
Mill Yard / F. Yard / A. Yard
at High Bay lighting
Culvert
Cold E/F Trans.
Paging
Street lighting
ITV Con.
20201
50101
Main shop
Fire
Cold
oil tank
Remelt Halon
17/sep Main Sub
Deluge spray
Insp.

schedule.
F. Test
Start.
今日 M/H F.
9/21 KE Coordinate Meeting.
1. Annealing drying
2. Hot 電気 Air-con
3. Deluge Nozzle a 方向.
4. Fire-Protection Com. Sche.
5. Cold SW
6. No. 2 a A.F. 1/3 1/4 中
7. FAW/R. E/R a Radder
8. Dife a. Loyd inspac
9. Area-40 grant SV.
10. Remelt office Final Insp.
11. Hot M/R

E/R, M/R, F/R
TEN/SKI
17/93

1985.09.21 あと41日

74
9/21~ あと 41日
9/20~ Cold Mill Flushing.
2. Annealing F dry-up 申請
9/23~ drying
A.F. No. 2 Punch list
F.W. ... 260 Pro-check.
charging car 333
cooling stand rail cant
Main 10/1-10/1 grant
Tem. Grant. (Bdrial will
Tension level) 10/1
live side reducer grant
SLD Def. roll Insp. juds 10/1 7x11
Table 10/1 centering.
Cuts Entry cool con 10/1 F/W
spool conv. 7x11 grant.
Flying shear cant grant
Flatiron Motor Base grant
Roof. Unit grant.
Forming Piler 10/1 1/2
entry table Motor base grant
Area 10 Band saw duct setting
grant prep. (c) 10/1
Me/Ho Joint seal guide
Fork 10/1
安全 10/1
Press. F/W work duct 10/1
1. [Wash]-way (charging Bucket)
9/23 9/24 pre-test Maintenance Shop.
9/25 (2) Pre-test = 6/10 drying
Electrical.
T. Shi local con
cut P.P.
R.F 10/1
Band saw dracs 10/1 10/1
A.M.F. Charging car. 9/22
lighting 15:00 ~
High Bay Hot Final Insp.
Culvert/cellor Hot Insp.
Remelt F/W
Marineurs, Hot, cold F/W
Paging 9/21: pre-check
Street lighting 10/1 4本 9/21
ITV. Connection connection
Crane 30101 ... cabling
S.H.F. ... transfer gas a 10/1
Five-Protection
Remelt. Holon. Dipmer
oil Tank Deluge Dip.
Yard piping 10/1
Punch Work.
Cold Deluge
Remelt Furnace. LT 9/28 v.
Remelt Area pit Insp. 9/23 10:00 ~

Adapt 10/1
10/1
Scale
oil Tank 10/1
Grand Pump 10/1

Rmelt Area 26-28 SA
29 No. road
30 3A

8日 挿入開始 ~ 締造終了

1985.09.28 あと34日

9/28 ~ 34日

9/29 11:00 ~ Spindle
冷
PM. EMERGENCY test (Pump)

ANN.

NO.1 Dryer ~ 10% AM (F)

cooling stand grant.

Coal stand (pre-test) 10/5(L)

grant 60% 10/10

shl Det. Roll & Insp.

Coal car grant prep.

Flushing of ship

cut to length. Flattener tank

Scrap car

Pay off real grant (10%)

Flushing of ship

R-F grant (type)

lifter car Roping (10% F)

oil tank Deluge

Cold Deluge

Band saw dust Roping

Cold Trans

Painter 10% (2) 2: 夜部 stop.

LAB. 2: 夜部 stop.

9/28 KE Coordinate meeting.

1.

2. Band Saw Comm. Schedule

3. Hot Computer room Arr. Con

4. Hot Belt wrapper

5. 100m Shear Explor

6. Cold coolant/E 3.5ft.

7. Cold Mill Work Roll Mark

8. Cold pull part.

9. Ten lev. Bridle roll: grant

10. Casting station Mold 4. 2.8

Area 10

注油 Pit cover / Warehouse

蒸気 Protector

鉄板 Band saw 7:00 Insp.

Drum Punch work 3.5ft.

Pit 4. 1. 1. 2. / 4. 2. 1. 2. 1. 2. 1. 2.

oil tank Deluge 10%

Cold Deluge Pressure test (E)

Band saw dust Roping

Cold Trans

Painter 10% (2) 2: 夜部 stop.

LAB. 2: 夜部 stop.

cold coolant Flushing

10/2 PM 6:30 (AM. 挿入開始 / Insp)

Flushing

Tem lev. 10% 1. 2. 3. ~ 10/4

cut. 10% leak

shl 10% prep.

10/20. 50mm/min

slab 29'

170 挿入 --> Melting

200 Bend Meeting Hit Cold.

8日 管理技術交流会

10/20 road 100% Insp

1985.10.06 あと26日

10月6日 ~ 26日

11:00am Cold Mill Hot Run Inspection.

ANNEALING F. No. 1 LT 10/14

No. 2 DRT 10/12

Weight cover.

charging car No Load test 挿入

cooling stand Assembling.

Tem Lev. 10% 再 Insp

grant

shl 10% 1. 2. 1. 2. 1. 2. 1. 2.

10/11 Grant all Finish

Work permit

KE Meeting.

1. Remelt part cover

2. " Guard post. 交違警報機 shut down

3. slab Heating F. 改造 (中)

4. Hot 30 項目の予通

5. Cold Mill Flushing coolant Finish

6. Annealing F. cluck.

7. Ten lev. Bridle Roll の Entry side grant.

8. Handling Attachmant log

9. Remelt F. cover up

10. Bearing の 長期 検査 方法

11. Casting station Mold 2. 2. 1. 2.

12. Removable

13. No. 1 water treatment water overflow

Medical Equip take off

Security office

cut

stream grant

coil stack / subvent tank grant

Piler cart.

Forming / Flush.

grant 1. 2. 1. 2. 1. 2. 1. 2.

Coal shed / sol. Tank /

Blower / 1. 2. 1. 2. 1. 2. 1. 2.

Leveler / leveler / Insp. Table /

Piler / Piler M. Base / rail. /

loop Tank 1. 2. 1. 2. 1. 2. 1. 2.

10/11 Grant all Finish

Work permit

- Air-con
- Fire - alarm.

77

oil tank
bolt / Nut.

- Cold Trans
- Mainours Hallon
- Remast Deluge Hallon

scalper PD 10/4 ~

10%. Hot punch list work.

Maintenance shop

1. 7H60
2. 500gta -> (E600ta) Hydraulic controls
3. lath drain

1985.10.12 あと20日

10/12 ~ あと20日

- Ten cable lock mark
- slit spire stand, cable, lock mark
- cut to cable; lock mark.

10/7 us connection
10% on punch.

5/10
10/10
10/10

Transfer car

N-Grass

W. Treatment cable marks

Labo 10/5 ~ CIVIL 10/5

Light ~ Load test { High bay light street light

Batches

Flush Ten 10/6 Fin.

cut Air leak / 10% 10/10 F

Ten-level 10/11 ~ 12 part.

A.F. cooling stand Assembly
Ten • Coil shield grant. ALL
• Amuse X. 10/10

slit • Flat / thickness / sh / print grant
• spool conv. cent.
• End unit. 10/10 unit.
• coil shield 10/10
• level Motor Base grant
• Solvate Tank grant
• Fucker F/10 (10/15)

R.F. Forming.
Forming 10/13 ~ 50g. check

Ten
slit } Cable mark Actual.
cut }
chiller 10/10
maint. Yast cable
crane 30201 } limit switch
30101 } check

10/13 ~ 30

Punch list: Punch work Singer

78

R. Forming: 10 M check

10/16 10/10 MAT F

LABO for Amotia testing unit

全4 checks
- 10/10 Insp. 10/10 10/10
Track scale / I.T.O.
Security room

Paging: 10/16 F
Grass con 10/10 10/10 10/10 door
Press

Flushing Ten lev. 10% 10/10 oil. 10/10
10% 10/10
cut. 10/10

10/19 10/14 10/14
Flushing 10/10 (10/10)

Remast Fire (Hallon) paging.
Deluge 10/10 10/10 (10/10)

10/13 BAND SAW Performance Demo Finish.

Fire-Pution. 10/10 32 F

Maint shop.
• 10/10 10/10
• 10/10
• 10/10
• 10/10
• 10/10
• 10/10
justification procedure

K/E Meeting (10/12)

1. Gase. comp. General layout
2. Gase. con. long filter
3. LAB. 10/10 10/10 10/10
4. F/A. 10/10 OFFICE
5. 10/10 10/10
6. Hot mill Housing linen 10/10
7. 100 m shear damage
8. CO2 low pressure
9. Roll part.
10. Ann. Fur.

1985.10.19 あと13日

10/19 10/13

Vehicle Maintenance.
Ten Lev. • punch list
• oil lubrication
slit/Emb • coil shield cut Insp.
• grant Insp (Tension reel, Bricks)
• 10/10 cleaning
• 10/10

cut to • Punch
• Gase. on 10/10

R.F. Forming unit Motor Base 10/10

galvanize part.

1985.10.31

P.A Provisional Acceptant
工事納期 (暫定受諾)

cut to
sh
oil
scrap removal.
sh

ITV 南車 = 1st - Pre-ch.
10/22 PM ITV 南車作業
Area 10 Punch work
1/20 Finishing work.

10/22 日 10日

tenor. 10/22: NLT 検査
10/23 NLT

sh: FW/cleaning w/ 共有音取除
cleaning

ANF. changing car rail
linear 調整

cut to: Pre-check. 10/23 NLT

Roll Form: drive side front
E stand: 10/24 NLT

1/20: weight scale a Centering
• slab heating
電磁炉 a 1st

File-Partition F/A near
R/area

215/154 → 33/191 → 48/141
10/27 10/28 10/29

ANN. 証書等取付
shop test
1/21 1/20 parking 改造
1/20 No. 2 Drawing

scalper
10/22 PP 検査

Punch-list
1/21 2/4

Final Inspection Schedule

新南車
Schedule 1/21
Gulf. Announcements FOLLOWING
null.
1/21 v. 1/20 v. 1/21

Gold 376/436
1/21 punch

10/22-26 10/27
Crane Maintenance 7) Work
Moist 善
Logd. Insp.

- 残工事の Schedule
- Documentation.
- 残 Training.
- Building close/cleaning.
- Ventilation System
- Fire-Protection System
 - Partition
 - Alarm
 - Halon.
 - sprinkler sys a 10/28
- Trench, Pit cover, Hand rail
Guide rail a schedule.
- Manual 類
- As-Built 図面.
- Punch-list item
Equipment / Area.
- Small Tool/Consumable/spare-part.
- Mobile Eq. Simple-Part
1/21 1/20 1/21
- Performance Demo.
- Communication System
- Utility System
- lane/Hoist Logd Insp.
- Lighting a Final Insp.

- 16 civil-Item.
- 17 Acc. System. 残工事引渡
- 18 Security & Safety System
- 19 LAB. 複内工事 a schedule.

1985.10.24 あと 8日

- 10/24.
- 11:00 ~ 12:00 事務 Meeting 3.
 - 12:00 検査 1/21 2/4

1591 1st a Small Tool

- All list
- CLA=B (280) 1/21 2/4

1/21 2/4 1/21 2/4

SCT =	755H	207	2) 1/21 2/4 1/21 2/4 1/21 2/4
	7600	1391	
	Novel	3	
		1591	1/21 2/4
SOR =	1BAH	2	1/21 2/4
	BAH	1503	
	JAP	6	
	ODK	10	
	SSC	72	
		1591	

7 月 度 実 績

T. YADA

- (1) NETWORK / Activity Summary (PJT 全体 / ONSHORE)
- (2) C.P.P.R 推移表.
- (3) { " 機械 / 電気 / piping 別 別記
" 電気 Work-Type 別 別記
" 全体 Work-Type 別 別記
- (4) 全体機器 進捗状況
- (5) 機器別 目標 - 実績 対比表. (Time-Now).
- (6) 図表
 - (A) ~~表~~ Comm. Schedule. (追加)
 - (B) Area-別 出来高 推移
 - (C) 計画作成用 Bar-chart.

(注). 機器別 目標 - 実績 対比 (9月1日基準) については
現状最大の目標の Comm. schedule による。おおよそ
12% の活用率に達するまでは出力は Request に対して計上しない。

EQUIPMENT PROGRESS (ELECTRIC) DETAIL :

WORK.	WORK-TYPE DESCRIPTION	LOCAL PRICE	MON. PRICE	MON. PROG	CUM. PRICE	CUM. PROG
1	ONLY PLACE ON THE FOUND. & OTH	7533	1686	22.4	5852	77.7
2	INSTALLATION WORK	3153	661	20.9	1322	41.8
3	PIPING & DUCTING WORK	3730	1343	36.0	2626	70.4
4A	REFRACTORY & INSULATION WORK	-	-	-	-	-
4B	REFRACTORY & INSULATION WORK	1267	151	11.9	1066	84.1
5	CRANE & HOIST	-	-	-	-	-
6	ELECTRICAL STATISTIC EQ. INSTA	502711	35735	7.1	438675	87.3
7	ELECTRICAL CAB. WIR. LIGHT.	638044	74520	11.7	550261	86.2
T	*** T O T A L ***	1156448	114076	9.9	999802	86.5

40,000 METRIC TON PER YEAR ALUMINUM ROLLING MILL PLANT

EQUIPMENT ERECTION WORKS

GARMCO PROJECT CONTRACT NO.82024-3

REF.NO. COJ-012

DATE 6-MIG-85

CALCULATION SHEET FOR JAPAN SUPPLY PORTION

PERIOD FROM 1-JUL-85 TO 31-JUL-85

CONTRACT TOTAL PRICE	CUMULATIVE PERCENT (%)	CUMULATIVE AMOUNT	PREVIOUS CUMULATIVE AMOUNT	PERIODIC PERCENT (%)	PERIODIC AMOUNT
10400000	77.65	8075600	6882900	11.42	1187700

NOTE: CUMULATIVE PERCENTAGE OF JAPAN SUPPLY PORTION IS EQUAL TO THAT OF LOCAL SUPPLY PORTION.

CONCLUDED

EQUIPMENT ERECTION WORKS

GARNCO PROJECT CONTRACT NO.82024-3

REF.NO. COL-023

DATE 6-AUG-85

CALCULATION SHEET FOR LOCAL SUPPLY PORTION

PERIOD FROM 1-JUL 85 TO 31 JUL-85

STA TUS	EQ NO	SER NO	EQUIPMENT DESCRIPTION	LOCAL PRICE	WK TP	TT ST	ACHIEVED (%) THIS MONTH				MONTHLY		CUMULATIVE	
							ST-1	ST-2	ST-3	ST-4	LOCAL AMOUNT	%	LOCAL AMOUNT	%
P	10101		CRANE FOR REMELT SHOP	7312	5	4	100.0	0.0	0.0	0.0	0	0.0	3656	50.0
	11101		MELTING FURNACE	--			0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	11101	01	MELTING FURNACE	10575	2	4	100.0	100.0	100.0	0.0	1050	10.0	9518	90.0
P	11101	02	MELTING FURNACE	32278	4A	3	100.0	100.0	0.0	0.0	7090	19.1	37314	95.0
P	11101	03	MELTING FURNACE	23644	3	4	100.0	100.0	100.0	0.0	2365	10.0	21280	90.0
P	11102		FLUX FEEDER	81	1	3	100.0	100.0	0.0	0.0	65	80.0	65	80.0
*	11103		LAUNDER AND PREHEATER	806	1	3	100.0	100.0	100.0	0.0	161	20.0	806	100.0
	11104		COVER CARRIAGE	--			0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	11104	01	COVER CARRIAGE	6043	5	4	100.0	100.0	0.0	0.0	0	0.0	4834	80.0
P	11104	02	COVER CARRIAGE	3424	2	4	100.0	100.0	100.0	0.0	343	10.0	3082	90.0
P	11160		MOTOR CONTROL CENTER	1848	6	3	100.0	100.0	0.0	0.0	0	0.0	1478	80.0
P	11161		OPERATION PANELS	462	6	3	100.0	90.0	0.0	0.0	351	76.0	351	76.0
P	11162		INSTRUMENT PANEL	1848	6	3	100.0	100.0	0.0	0.0	74	4.0	1478	80.0
P	11202		FLUX FEEDER	81	1	3	100.0	100.0	0.0	0.0	65	80.0	65	80.0
	12101		HOLDING FURNACE	--			0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	12101	01	HOLDING FURNACE	8822	2	4	100.0	100.0	100.0	0.0	882	10.0	7940	90.0
P	12101	02	HOLDING FURNACE	26689	4A	3	100.0	100.0	0.0	0.0	11217	44.7	25355	95.0
P	12101	03	HOLDING FURNACE	5630	3	4	100.0	100.0	95.0	0.0	479	8.5	4983	88.5
P	12102		ROD FEEDER	242	1	3	100.0	100.0	0.0	0.0	0	0.0	194	80.0
P	12103		LAUNDER AND PREHEATER	806	1	3	100.0	100.0	0.0	0.0	0	0.0	645	80.0
	12104		DEGASSING SYSTEM	1007	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	12105		FILTERING SYSTEM	1214	2	4	100.0	100.0	0.0	0.0	0	0.0	1531	90.0
P	12140		HYDRAULIC SYSTEM	806	2	4	100.0	100.0	0.0	0.0	645	80.0	645	80.0
	12161		OPERATION PANELS	462	6	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	13101		DIRECT CHILL CASTING SYSTEM	4854	2	4	100.0	100.0	0.0	0.0	1941	40.0	3883	80.0
	13102		EXHAUST SYSTEM	--			0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	13102	01	EXHAUST SYSTEM	141	2	4	100.0	100.0	100.0	0.0	127	90.0	127	90.0
P	13102	02	EXHAUST SYSTEM	2041	3	4	100.0	100.0	0.0	0.0	1633	80.0	1633	80.0
P	13140		HYDRAULIC SYSTEM	141	2	4	100.0	100.0	0.0	0.0	113	80.0	113	80.0
P	13160		MOTOR CONTROL CENTER	185	6	3	100.0	100.0	0.0	0.0	0	0.0	148	80.0
	13161		OPERATION PANELS	1663	6	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	14101		DUST COLLECTING SYSTEM	--			0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	14101	01	DUST COLLECTING SYSTEM	1047	2	4	100.0	100.0	50.0	0.0	52	5.0	890	85.0
P	14101	02	DUST COLLECTING SYSTEM	5056	2	4	100.0	100.0	50.0	0.0	2276	45.0	4298	85.0
P	14101	03	DUST COLLECTING SYSTEM	2014	2	4	100.0	100.0	100.0	0.0	0	0.0	1813	90.0
P	14101	04	DUST COLLECTING SYSTEM	25685	3	4	100.0	100.0	0.0	0.0	5753	22.4	20548	80.0
P	14101	05	DUST COLLECTING SYSTEM	38000	4B	2	100.0	90.0	0.0	0.0	25270	66.5	37430	98.5
P	14102		HYDROCHLORIC ACID MIST TREATMENT EQUIPMENT	423	2	4	100.0	100.0	0.0	0.0	338	80.0	338	80.0

40,000 METRIC TON PER YEAR ALUMINIUM ROLLING MILL PLANT

EQUIPMENT ERECTION WORKS

GARMCO PROJECT CONTRACT NO.82024-3

REF.NO. COL-023

DATE 6-AUG-85

CALCULATION SHEET FOR LOCAL SUPPLY PORTION

PERIOD FROM 1-JUL 85 TO 31-JUL-85

STA TUS	EQ NO	SER NO	EQUIPMENT DESCRIPTION	LOCAL PRICE	WK TP	TT ST	ACHIEVED (%) THIS MONTH				MONTHLY		CUMULATIVE	
							ST-1	ST-2	ST-3	ST-4	LOCAL AMOUNT	%	LOCAL AMOUNT	%
P	14160		MOTOR CONTROL CENTER	1016	6	3	100.0	100.0	0.0	0.0	0	0.0	813	80.0
P	14161		OPERATION PANELS	1016	6	3	100.0	100.0	0.0	0.0	913	80.0	813	80.0
**	16171		11KV/415V TRANSFORMER	11457	6	3	100.0	100.0	100.0	0.0	0	0.0	11457	100.0
*	16172		415V SWITCHGEAR	11549	6	3	100.0	100.0	100.0	0.0	1155	10.0	11549	100.0
*	16173		POWER DISTRIBUTION BOARDS	924	6	3	100.0	100.0	100.0	0.0	92	10.0	924	100.0
P	16189		WIRING AND ACCESSORIES	36587	7	3	100.0	80.0	80.0	0.0	8305	22.7	31465	86.0
P	16273		MISCELLANEOUS DISTRIBUTION BOARDS	739	6	3	100.0	100.0	0.0	0.0	0	0.0	591	80.0
	19101		WEIGH SCALE FOR SCRAP	201	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19102		SCRAP CHARGING BUCKET	2417	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19103		DROSS RECLAIM UNIT	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19103	01	DROSS RECLAIM UNIT	4049	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19103	02	DROSS RECLAIM UNIT	422	3	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19103	03	DROSS RECLAIM UNIT	403	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19103	04	DROSS RECLAIM UNIT	370	6	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19104		SLAB TRANSFER TABLE	1410	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19105		SCRAP REMOVAL FROM COIL SPOOL	1410	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19190		SIMPLE PARTS	4028	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19201		WEIGH SCALE FOR ADDITIVE	60	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19202		SCRAP CHARGING BUCKET	2417	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19301		WEIGH SCALE FOR SLAB CAST IN HOUSE	81	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	19302		SCRAP CHARGING BUCKET	2417	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
AREA TOTAL				306003					73363	24.0	254053	83.0		

EQUIPMENT ERECTION WORKS

GARMCO PROJECT CONTRACT NO.82024-3

REF.NO. COL-023

DATE 6-AUG-85

CALCULATION SHEET FOR LOCAL SUPPLY PORTION

PERIOD FROM 1-JUL-85 TO 31-JUL-85

STA TUS	EQ NO	SER NO	EQUIPMENT DESCRIPTION	LOCAL PRICE	WK TP	TT ST	ACHIEVED (%) THIS MONTH				MONTHLY		CUMULATIVE	
							ST-1	ST-2	ST-3	ST-4	LOCAL AMOUNT	%	LOCAL AMOUNT	%
P	20101		CRANE FOR SLAB PREPARATION YARD	6506	5	4	100.0	0.0	0.0	0.0	0	0.0	3253	50.0
	21101		ENTRY TABLE	2014	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	21102		BAND SAW	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	21102	01	BAND SAW	1007	2	4	0.0	0.0	0.0	0.0	0	0.0	0	0.0
	21102	02	BAND SAW	1007	1	3	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	21160		MOTOR CONTROL CENTER	924	6	3	100.0	100.0	0.0	0.0	0	0.0	739	80.0
P	21161		OPERATION PANEL	370	6	3	100.0	100.0	0.0	0.0	0	0.0	296	80.0
P	22101		ENTRY TABLE	2014	2	4	100.0	100.0	100.0	0.0	0	0.0	1813	90.0
P	22102		TURN TABLE	4935	2	4	100.0	100.0	0.0	0.0	0	0.0	3948	80.0
P	22103		CLAMP FRAME AND ROLLER TABLE	6949	2	4	100.0	100.0	100.0	0.0	695	10.0	6254	90.0
P	22104		MILLING HEAD	6647	2	4	100.0	100.0	100.0	0.0	664	10.0	5982	90.0
P	22105		EXIT TABLE	1209	2	4	100.0	100.0	100.0	0.0	0	0.0	1088	90.0
	22106		CHIP EXHAUSTING SYSTEM	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	22106	01	CHIP EXHAUSTING SYSTEM	1611	2	4	100.0	100.0	100.0	0.0	161	10.0	1450	90.0
P	22106	02	CHIP EXHAUSTING SYSTEM	604	2	4	100.0	100.0	100.0	0.0	61	10.0	544	90.0
P	22106	03	CHIP EXHAUSTING SYSTEM	3626	2	4	100.0	100.0	100.0	0.0	1813	50.0	3263	90.0
*	22106	04	CHIP EXHAUSTING SYSTEM	705	1	3	100.0	100.0	100.0	0.0	141	20.0	705	100.0
P	22106	05	CHIP EXHAUSTING SYSTEM	1007	2	4	100.0	100.0	100.0	0.0	100	10.0	906	90.0
P	22106	06	CHIP EXHAUSTING SYSTEM	403	2	4	100.0	100.0	100.0	0.0	202	50.0	363	90.0
P	22106	07	CHIP EXHAUSTING SYSTEM	3519	3	4	100.0	100.0	0.0	0.0	0	0.0	2815	80.0
	22140		HYDRAULIC SYSTEM	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
*	22140	01	HYDRAULIC SYSTEM	765	2	4	100.0	100.0	100.0	100.0	153	20.0	765	100.0
*	22140	02	HYDRAULIC SYSTEM	704	3	4	100.0	100.0	100.0	100.0	141	20.0	704	100.0
	22150		LUBRICATING SYSTEM (INSTALLED IN THE INDIVIDUAL EQUIP.)	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	22160		MOTOR CONTROL CENTER	1848	6	3	100.0	100.0	50.0	0.0	185	10.0	1663	90.0
*	22161		OPERATION PANELS	1109	6	3	100.0	100.0	100.0	0.0	222	20.0	1109	100.0
	23101		SLAB HEATING FURNACE	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	23101	01	SLAB HEATING FURNACE	27454	2	4	100.0	100.0	0.0	0.0	0	0.0	21963	80.0
P	23101	02	SLAB HEATING FURNACE	5700	2	4	100.0	100.0	80.0	0.0	456	8.0	5016	88.0
P	23101	03	SLAB HEATING FURNACE	5600	4A	3	100.0	100.0	0.0	0.0	0	0.0	5320	95.0
P	23101	04	SLAB HEATING FURNACE	43066	3	4	100.0	100.0	100.0	0.0	9474	22.0	38759	90.0
P	23101	05	SLAB HEATING FURNACE	20326	7	3	98.0	95.0	70.0	0.0	1809	8.9	19188	94.4
	23102		SLAB CHARGING EQUIPMENT	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	23102	01	SLAB CHARGING EQUIPMENT	2014	2	4	100.0	100.0	100.0	0.0	202	10.0	1813	90.0
P	23102	02	SLAB CHARGING EQUIPMENT	806	2	4	100.0	100.0	100.0	0.0	80	10.0	725	90.0
P	23102	03	SLAB CHARGING EQUIPMENT	706	2	4	100.0	100.0	100.0	0.0	70	10.0	815	90.0

EQUIPMENT ERECTION WORKS

GARMCO PROJECT CONTRACT NO.82024-3

REF.NO. COL-023

DATE 6-AUG-85

CALCULATION SHEET FOR LOCAL SUPPLY PORTION

PERIOD FROM 1-JUL-85 TO 31-JUL-85

STA TUS	EQ NO	SER NO	EQUIPMENT DESCRIPTION	LOCAL PRICE	WK TP	TT ST	ACHIEVED (%) THIS MONTH				MONTHLY		CUMULATIVE	
							ST-1	ST-2	ST-3	ST-4	LOCAL AMOUNT	%	LOCAL AMOUNT	%
P	23102	04	SLAB CHARGING EQUIPMENT	6969	2	4	100.0	100.0	100.0	0.0	697	10.0	6272	90.0
	23103		SLAB DISCHARGING EQUIPMENT	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	23103	01	SLAB DISCHARGING EQUIPMENT	806	2	4	100.0	100.0	100.0	0.0	80	10.0	725	90.0
P	23103	02	SLAB DISCHARGING EQUIPMENT	6345	2	4	100.0	100.0	100.0	0.0	635	10.0	5711	90.0
P	23104		SHOE RETURN EQUIPMENT	1108	2	4	100.0	100.0	100.0	0.0	111	10.0	997	90.0
P	23105		WEIGH SCALE	292	2	4	100.0	100.0	100.0	0.0	28	10.0	254	90.0
	23140		HYDRAULIC SYSTEM	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	23140	01	HYDRAULIC SYSTEM	1099	2	4	100.0	100.0	100.0	0.0	109	10.0	979	90.0
P	23140	02	HYDRAULIC SYSTEM	2815	3	4	100.0	100.0	100.0	0.0	732	26.0	2534	90.0
	23150		LUBRICATING SYSTEM	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	23150	01	LUBRICATING SYSTEM	181	2	4	100.0	100.0	100.0	0.0	163	90.0	163	90.0
P	23150	02	LUBRICATING SYSTEM	281	3	4	100.0	100.0	100.0	0.0	253	90.0	253	90.0
P	23160		MOTOR CONTROL CENTER	3603	6	3	100.0	100.0	50.0	0.0	361	10.0	3243	90.0
P	23161		OPERATION PANEL	1848	6	3	100.0	100.0	50.0	0.0	185	10.0	1663	90.0
P	23162		INSTRUMENT PANEL	924	6	3	100.0	100.0	50.0	0.0	93	10.0	832	90.0
P	23165		PROGRAMMABLE LOGIC CONTROLLER	72	6	3	100.0	100.0	50.0	0.0	83	90.0	83	90.0
P	24101		ENTRY ROLLER TABLE	53237	2	4	100.0	100.0	100.0	0.0	5323	10.0	47913	90.0
	24102		HOT ROLLING MILL	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	24102	01	HOT ROLLING MILL	77871	2	4	100.0	100.0	100.0	0.0	7787	10.0	70084	90.0
P	24102	02	HOT ROLLING MILL	22479	2	4	100.0	100.0	100.0	0.0	2250	10.0	20249	90.0
P	24102	03	HOT ROLLING MILL	46126	2	4	100.0	50.0	100.0	0.0	13838	30.0	32288	70.0
P	24102	04	HOT ROLLING MILL	20102	2	4	100.0	100.0	100.0	0.0	2010	10.0	18092	90.0
P	24102	05	HOT ROLLING MILL	11752	3	4	100.0	100.0	100.0	0.0	1175	10.0	10577	90.0
P	24103		SIDE TRIMMER	10212	2	4	100.0	100.0	100.0	0.0	1021	10.0	9191	90.0
P	24104		SCRAP DISPOSAL	5076	2	4	100.0	100.0	0.0	0.0	0	0.0	4061	80.0
	24105		ENTRY COILER	-	-	-	0.0	0.0	0.0	0.0	0	0.0	0	0.0
P	24105	01	ENTRY COILER	16900	2	4	100.0	100.0	100.0	0.0	1690	10.0	15210	90.0
P	24105	02	ENTRY COILER	967	2	4	100.0	100.0	100.0	0.0	96	10.0	870	90.0
P	24105	03	ENTRY COILER	3344	2	4	100.0	100.0	100.0	0.0	335	10.0	3010	90.0
P	24106		EXIT COILER	28663	2	4	100.0	100.0	100.0	0.0	2867	10.0	25797	90.0
P	24107		EXIT ROLLER TABLE	42924	2	4	100.0	100.0	100.0	0.0	4293	10.0	38632	90.0
P	24108		100 MMT CROPPING SHEAR	41171	2	4	100.0	100.0	100.0	0.0	4119	10.0	37072	90.0
P	24109		ROLL CHANGING EQUIPMENT	4512	2	4	100.0	100.0	100.0	0.0	451	10.0	4061	90.0
P	24110		COIL CAR	3122	2	4	100.0	100.0	100.0	0.0	312	10.0	2810	90.0
P	24111		COIL BENDING MACHINE	947	2	4	100.0	100.0	100.0	0.0	94	10.0	852	90.0
*	24112		COIL SKID	1954	1	3	100.0	100.0	100.0	0.0	391	20.0	1954	100.0
P	24113		WEIGH SCALE	2981	2	4	100.0	100.0	100.0	0.0	298	10.0	2683	90.0
P	24114		COOLANT CIRCULATION SYSTEM	21673	2	4	100.0	100.0	100.0	0.0	2168	10.0	19506	90.0

AREA	EQN	SER	DESCRIPTION		(P) L.PRICE	(E) EXPECT	(E/P)	(A) ACTUAL	(A/P)	(A/T)	(E)-(A)
1	10101		CRANE FOR REMELT SHO		7312	7312	100.0	3656	50.0	50.0	3656
[10] TOTAL					7312	7312	100.0	3656	50.0	50.0	3656
1	11101	01	MELTING FURNACE	FURNACE	10575	9095	86.0	9510	90.0	104.7	0
1	11101	02	MELTING FURNACE	REFRACTORY	39278	37314	95.0	37314	95.0	100.0	0
1	11101	03	MELTING FURNACE	DUCTING &	23644	23119	97.8	21280	90.0	92.0	1840
1	11102		FLUX FEEDER		81	75	92.0	65	80.0	87.0	10
1	11103		LAUNDER AND PREHEATE		806	742	92.0	806	100.0	103.7	0
1	11104	01	COVER CARRIAGE	COVER CARR	6043	5197	86.0	4834	80.0	93.0	363
1	11104	02	COVER CARRIAGE	GRINDER &	3424	2945	86.0	3082	90.0	104.7	0
1	11160		MOTOR CONTROL CENTER		1848	1478	80.0	1478	80.0	100.0	0
1	11161		OPERATION PANELS		462	370	80.0	351	76.0	95.0	18
1	11162		INSTRUMENT PANEL		1848	1478	80.0	1478	80.0	100.0	0
1	11202		FLUX FEEDER		81	75	92.0	65	80.0	87.0	10
[11] TOTAL					88090	81886	93.0	80271	91.1	98.0	1616
1	12101	01	HOLDING FURNACE	FURNACE	8822	7587	86.0	7940	90.0	104.7	0
1	12101	02	HOLDING FURNACE	REFRACTORY	26689	25355	95.0	25355	95.0	100.0	0
1	12101	03	HOLDING FURNACE	DUCTING &	5630	5505	97.8	4983	88.5	90.5	522
1	12102		ROD FEEDER		242	223	92.0	194	80.0	87.0	29
1	12103		LAUNDER AND PREHEATE		806	742	92.0	645	80.0	87.0	97
1	12104		DEGASSING SYSTEM		1007	866	86.0	0	0.0	0.0	866
1	12105		FILTERING SYSTEM		1914	1646	86.0	1531	80.0	93.0	115
1	12140		HYDRAULIC SYSTEM		806	693	86.0	645	80.0	93.0	48
1	12161		OPERATION PANELS		462	370	80.0	0	0.0	0.0	370
[12] TOTAL					46378	42985	92.7	41291	89.0	96.1	1694
1	13101		DIRECT CHILL CASTING		4854	3883	80.0	3883	80.0	100.0	0
1	13102	01	EXHAUST SYSTEM	FAN	141	113	80.0	127	90.0	112.5	0
1	13102	02	EXHAUST SYSTEM	DUCTING	2041	1532	75.0	1633	80.0	106.6	0
1	13140		HYDRAULIC SYSTEM		141	113	80.0	113	80.0	100.0	0
1	13160		MOTOR CONTROL CENTER		185	128	69.3	148	80.0	115.5	0
1	13161		OPERATION PANELS		1663	1152	69.3	0	0.0	0.0	1152
[13] TOTAL					9025	6921	76.7	5904	65.4	85.3	1017
1	14101	01	DUST COLLECTING SYST	FAN	1047	733	70.0	890	85.0	121.4	0
1	14101	02	DUST COLLECTING SYST	BAG FILTER	5056	3539	70.0	4298	85.0	121.4	0
1	14101	03	DUST COLLECTING SYST	STACK	2014	1410	70.0	1813	90.0	128.6	0
1	14101	04	DUST COLLECTING SYST	DUCT	25685	22192	86.4	20548	80.0	92.6	1644
1	14101	05	DUST COLLECTING SYST	INSULATION	38000	38000	100.0	37430	98.5	98.5	570
1	14102		HYDROCHLORIC ACID MI		423	296	70.0	338	80.0	114.3	0
1	14160		MOTOR CONTROL CENTER		1016	764	75.2	813	80.0	106.3	0
1	14161		OPERATION PANELS		1016	764	75.2	813	80.0	106.3	0
[14] TOTAL					74257	67698	91.2	66942	90.1	98.9	756

EQUIPMENT ERECTION PROGRESS REPORT

[1-AUG-85]

AREA	EQN	SER	DESCRIPTION	(P) L. PRICE	(E) EXPECT	(E/P)	(A) ACTUAL	(A/P)	(A/E)	(E)-(A)
1	16171		11KV/415V TRANSFORME	11457	9166	80.0	11457	100.0	125.0	0
1	16172		415V SWITCHGEAR	11549	9239	80.0	11549	100.0	125.0	0
1	16173		POWER DISTRIBUTION B	924	739	80.0	924	100.0	125.0	0
1	16189		WIRING AND ACCESSORI	36587	25611	70.0	31465	86.0	122.9	0
1	16273		MISCELLANEOUS DISTRI	739	591	80.0	591	80.0	100.0	0
[16] TOTAL				61256	45346	74.0	55986	91.4	123.5	0
1	19101		WEIGH SCALE FOR SCRA	201	141	70.0	0	0.0	0.0	141
1	19102		SCRAP CHARGING BUCKE	2417	1692	70.0	0	0.0	0.0	1692
1	19103	01	DROSS RECLAIM UNIT FEEDER, SEP	4049	2834	70.0	0	0.0	0.0	2834
1	19103	02	DROSS RECLAIM UNIT DUCT	422	365	86.4	0	0.0	0.0	365
1	19103	03	DROSS RECLAIM UNIT CONTAINER,	403	282	70.0	0	0.0	0.0	282
1	19103	04	DROSS RECLAIM UNIT OPERATION	370	278	75.2	0	0.0	0.0	278
1	19104		SLAB TRANSFER TABLE	1410	987	70.0	0	0.0	0.0	987
1	19105		SCRAP REMOVAL FROM C	1410	987	70.0	0	0.0	0.0	987
1	19190		SIMPLE PARTS	4028	2819	70.0	0	0.0	0.0	2819
1	19201		WEIGH SCALE FOR ADDI	60	42	70.0	0	0.0	0.0	42
1	19202		SCRAP CHARGING BUCKE	2417	1692	70.0	0	0.0	0.0	1692
1	19301		WEIGH SCALE FOR SLAB	81	57	70.0	0	0.0	0.0	57
1	19302		SCRAP CHARGING BUCKE	2417	1692	70.0	0	0.0	0.0	1692
[19] TOTAL				19685	13866	70.4	0	0.0	0.0	13866

AREA	10	TOTAL	306003	266015	254050	11965
		(E/P)	=	86.9		
		(A/P)	=	83.0		
		(A/E)	=	95.5		

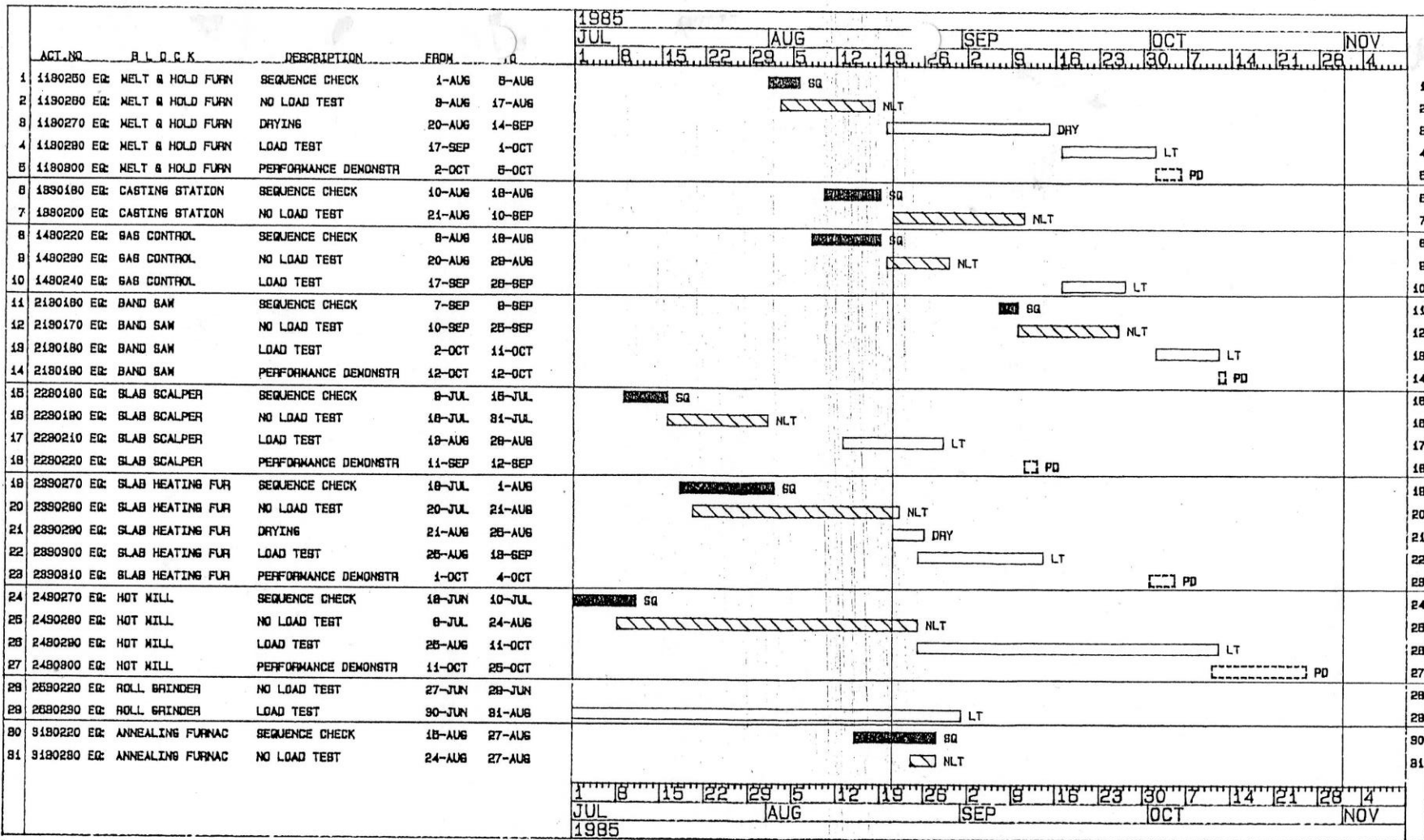
AREA	EQN	SER	DESCRIPTION	(P) L.PRICE	(F) EXPECT	(E/P)	(A) ACTUAL	(A/P)	(A/E)	(E)-(A)
2	20101		CRANE FOR SLAB PREPA	6506	6506	100.0	3253	50.0	50.0	3253
			[20] TOTAL	6506	6506	100.0	3253	50.0	50.0	3253
2	21101		ENTRY TABLE	2014	0	0.0	0	0.0	0.0	0
2	21102	01	BAND SAW SAW HEAD &	1007	0	0.0	0	0.0	0.0	0
2	21102	02	BAND SAW CHIP COLLE	1007	0	0.0	0	0.0	0.0	0
2	21160		MOTOR CONTROL CENTER	924	249	26.7	739	80.0	297.2	0
2	21161		OPERATION PANEL	370	100	26.9	296	80.0	297.2	0
			[21] TOTAL	5322	348	6.5	1035	19.5	297.2	0
2	22101		ENTRY TABLE	2014	1913	95.0	1813	90.0	94.7	101
2	22102		TURN TABLE	4935	4658	95.0	3948	80.0	84.2	740
2	22103		CLAMP FRAME AND ROLL	6949	6602	95.0	6254	90.0	94.7	347
2	22104		MILLING HEAD	6647	6315	95.0	5992	90.0	94.7	332
2	22105		EXIT TABLE	1209	1149	95.0	1088	90.0	94.7	60
2	22106	01	CHIP EXHAUSTING SYST CRUSHER	1611	1530	95.0	1450	90.0	94.7	81
2	22106	02	CHIP EXHAUSTING SYST FAN	604	574	95.0	544	90.0	94.7	30
2	22106	03	CHIP EXHAUSTING SYST CYCLONE CH	3626	3445	95.0	3263	90.0	94.7	181
2	22106	04	CHIP EXHAUSTING SYST PLATFORM,I	705	705	100.0	705	100.0	100.0	0
2	22106	05	CHIP EXHAUSTING SYST VIBRATING	1007	957	95.0	906	90.0	94.7	50
2	22106	06	CHIP EXHAUSTING SYST SOUNDPROOF	403	383	95.0	363	90.0	94.7	20
2	22106	07	CHIP EXHAUSTING SYST DUCT	3519	3519	100.0	2815	80.0	80.0	704
2	22140	01	HYDRAULIC SYSTEM HYDRAULIC	765	727	95.0	765	100.0	105.3	0
2	22140	02	HYDRAULIC SYSTEM PIPING	704	704	100.0	704	100.0	100.0	0
2	22160		MOTOR CONTROL CENTER	1848	1663	90.0	1663	90.0	100.0	0
2	22161		OPERATION PANELS	1109	998	90.0	1109	100.0	111.1	0
			[22] TOTAL	37655	35871	95.3	33372	88.6	93.0	2498
2	23101	01	SLAB HEATING FURNACE FURNACE BO	27454	25027	91.2	21963	80.0	87.8	3064
2	23101	02	SLAB HEATING FURNACE FAN	5700	5196	91.2	5016	88.0	96.5	180
2	23101	03	SLAB HEATING FURNACE REFRACTORY	5600	5256	93.9	5320	95.0	101.2	0
2	23101	04	SLAB HEATING FURNACE PIPE,DUCT	43066	43066	100.0	38759	90.0	90.0	4307
2	23101	05	SLAB HEATING FURNACE WIRING MAT	20326	19917	98.0	19188	94.4	96.3	730
2	23102	01	SLAB CHARGING EQUIPM SLAB TRANS	2014	2014	100.0	1813	90.0	90.0	201
2	23102	02	SLAB CHARGING EQUIPM SLAB LENGT	806	806	100.0	725	90.0	90.0	81
2	23102	03	SLAB CHARGING EQUIPM LIFTER AT	906	906	100.0	815	90.0	90.0	91
2	23102	04	SLAB CHARGING EQUIPM OTHER	6969	6969	100.0	6272	90.0	90.0	697
2	23103	01	SLAB DISCHARGING EQU LIFTER AT	606	606	100.0	725	90.0	90.0	81
2	23103	02	SLAB DISCHARGING EQU OTHER	6345	6345	100.0	5711	90.0	90.0	635
2	23104		SHOE RETURN EQUIPMEN	1108	1010	91.2	977	90.0	98.7	13
2	23105		WEIGH SCALE	282	257	91.2	254	90.0	98.7	3
2	23140	01	HYDRAULIC SYSTEM UNIT	1088	992	91.2	979	90.0	98.7	13
2	23140	02	HYDRAULIC SYSTEM PIPING	2815	2815	100.0	2534	90.0	90.0	282
2	23150	01	LUBRICATING SYSTEM PUMP UNIT	181	165	91.2	163	90.0	98.7	2
2	23150	02	LUBRICATING SYSTEM PIPING	281	281	100.0	253	90.0	90.0	28
2	23160		MOTOR CONTROL CENTER	3603	3110	86.3	3243	90.0	104.3	0
2	23161		OPERATION PANEL	1848	1595	86.3	1663	90.0	104.3	0

AREA	EQN	SER	DESCRIPTION	(P) L.PRICE	(E) EXPECT	(E/P)	(A) ACTUAL	(A/P)	(A/E)	(E)-(A)	
2	23162		INSTRUMENT PANEL	924	798	86.3	832	90.0	104.3	0	
2	23165		PROGRAMMABLE LOGIC C	92	79	86.3	83	90.0	104.3	0	
I 23 I TOTAL				132214	127411	96.4	117308	88.7	92.1	10104	
2	24101		ENTRY ROLLER TABLE	53237	53237	100.0	47913	90.0	90.0	5324	
2	24102	01	HOT ROLLING MILL	MILL STAND	77871	72973	93.7	70084	90.0	96.0	2889
2	24102	02	HOT ROLLING MILL	COMBINATIO	22499	21884	93.7	20249	90.0	96.0	835
2	24102	03	HOT ROLLING MILL	SPINDLE,WO	46126	43225	93.7	32288	70.0	74.7	10936
2	24102	04	HOT ROLLING MILL	MAIN MOTOR	20102	18838	93.7	18092	90.0	96.0	746
2	24102	05	HOT ROLLING MILL	PIPE & SUP	11752	11611	98.8	10577	90.0	91.1	1034
2	24103		SIDE TRIMMER	10212	10212	100.0	9191	90.0	90.0	1021	
2	24104		SCRAP DISPOSAL	5076	5076	100.0	4061	80.0	80.0	1015	
2	24105	01	ENTRY COILER	REEL ETC.	16900	16900	100.0	15210	90.0	90.0	1690
2	24105	02	ENTRY COILER	SHEAR	967	967	100.0	870	90.0	90.0	97
2	24105	03	ENTRY COILER	PINCH ROLL	3344	3344	100.0	3010	90.0	90.0	334
2	24106		EXIT COILER	28663	28663	100.0	25797	90.0	90.0	2866	
2	24107		EXIT ROLLER TABLE	42924	42924	100.0	38632	90.0	90.0	4292	
2	24108		100 MMT CROPPING SHE	41191	41191	100.0	37072	90.0	90.0	4119	
2	24109		ROLL CHANGING EQUIPH	4512	4512	100.0	4061	90.0	90.0	451	
2	24110		COIL CAR	3122	3122	100.0	2810	90.0	90.0	312	
2	24111		COIL BENDING MACHINE	947	947	100.0	852	90.0	90.0	95	
2	24112		COIL SKID	1954	1954	100.0	1754	100.0	100.0	0	
2	24113		WEIGH SCALE	2981	2981	100.0	2683	90.0	90.0	298	
2	24114		COOLANT CIRCULATION	21673	21673	100.0	19506	90.0	90.0	2167	
2	24115	01	FUME REMOVAL SYSTEM	MECHANICAL	3485	3485	100.0	3137	90.0	90.0	349
2	24115	02	FUME REMOVAL SYSTEM	DUCTING	17593	17382	98.8	15834	90.0	91.1	1548
2	24116		X-RAY THICKNESS GAUC	1007	1007	100.0	906	90.0	90.0	101	
2	24140	01	HYDRAULIC SYSTEM FOR	MECHANICAL	1309	1309	100.0	1178	90.0	90.0	131
2	24140	02	HYDRAULIC SYSTEM FOR	PIPING	2463	2433	98.8	2217	90.0	91.1	217
2	24150	01	OIL LUBRICATION SYST	MECHANICAL	1108	1108	100.0	1108	100.0	100.0	0
2	24150	02	OIL LUBRICATION SYST	PIPING	2111	2086	98.8	2111	100.0	101.2	0
2	24151		OIL MIST LUBRICATION	745	745	100.0	671	90.0	90.0	75	
2	24152		GREASE LUBRICATION S	302	302	100.0	272	90.0	90.0	30	
2	24160		MOTOR CONTROL CENTER	12658	11666	87.4	11645	92.0	105.2	0	
2	24161		OPERATION PANEL	2495	2181	87.4	2295	92.0	105.2	0	
2	24163		RELAY PANEL	1109	969	87.4	1109	100.0	114.4	0	
2	24164		SUPERVISORY PANEL	3326	2908	87.4	3326	100.0	114.4	0	
2	24165		PROGRAMMABLE LOGIC C	2217	1938	87.4	1955	90.0	103.0	0	
2	24166		COMPUTER SYSTEM	4158	3635	87.4	249	6.0	6.2	3385	
2	24167	01	MOTOR COOLING SYSTEM	MECHANICAL	1773	1773	100.0	1649	93.0	93.0	124
2	24167	02	MOTOR COOLING SYSTEM	DUCT	1759	1738	98.8	1530	87.0	88.1	208
2	24168		INDUSTRIAL TELEVISIO	370	323	87.4	140	40.0	45.8	175	
2	24169		PULPIT	544	544	100.0	305	56.0	56.0	239	
2	24170		MAIN DRIVE POWER SUP	49614	43373	87.4	44653	90.0	103.0	0	
2	24240	01	HYDRAULIC SYSTEM FOR	MECHANICAL	19558	19558	100.0	17602	90.0	90.0	1956
2	24240	02	HYDRAULIC SYSTEM FOR	PIPING	55100	54439	98.8	49590	90.0	91.1	4849
2	24270		ENTRY COILER POWER S	4158	3635	87.4	3742	90.0	103.0	0	
2	24340	01	HYDRAULIC SYSTEM FOR	MECHANICAL	17101	17101	100.0	17101	100.0	100.0	0

AREA	EQN	SER	DESCRIPTION	(P) L.PRICE	(E) EXPECT	(E/P)	(A) ACTUAL	(A/P)	(A/E)	(E)-(A)
2	24370		EXIT COILER POWER SU	12658	11066	87.4	11392	90.0	103.0	0
2	24470		ENTRY ROLLER TABLE P	7207	6300	87.4	6486	90.0	103.0	0
2	24570		EXIT ROLLER TABLE PO	8223	7189	87.4	7401	90.0	103.0	0
[24] TOTAL				685389	659788	96.3	609748	89.0	92.4	50040
2	25101	01	LARGE ROLL GRINDER MECHANICAL	24352	23694	97.3	21917	90.0	92.5	1778
2	25101	02	LARGE ROLL GRINDER ELECTRICAL	1848	1748	94.6	1811	98.0	103.6	0
2	25101	03	LARGE ROLL GRINDER WIRING MAT	2679	2679	100.0	2679	100.0	100.0	0
2	25102		CHOCK SETTING EQUIPM	40	40	100.0	0	0.0	0.0	40
2	25103		ROLL CRADLES	604	604	100.0	604	100.0	100.0	0
2	25201	01	SMALL ROLL GRINDER MECHANICAL	11260	10956	97.3	11260	100.0	102.8	0
2	25201	02	SMALL ROLL GRINDER ELECTRICAL	1848	1748	94.6	1663	90.0	95.1	85
2	25201	03	SMALL ROLL GRINDER WIRING MAT	2125	2125	100.0	2125	100.0	100.0	0
[25] TOTAL				44756	43595	97.4	42059	94.0	96.5	1536
2	26171		11KV/415V TRANSFORME	11457	10016	87.4	11457	100.0	114.4	0
2	26172		415V SWITCHGEAR	11734	10258	87.4	11734	100.0	114.4	0
2	26173		POWER DISTRIBUTION B	647	566	87.4	647	100.0	114.4	0
2	26189		WIRING AND ACCESSORI	109853	109853	100.0	107876	98.2	98.2	1977
2	26273		MISC.DISTRIBUTION BO	370	323	87.4	296	80.0	91.5	27
[26] TOTAL				134061	131016	97.7	132010	98.5	100.8	0
2	29190		SIMPLE PARTS	14100	14100	100.0	0	0.0	0.0	14100
[29] TOTAL				14100	14100	100.0	0	0.0	0.0	14100

AREA	20	TOTAL	1 0 6 0 0 0 3	1 0 1 8 6 3 4	9 3 8 7 8 4	7 9 8 5 0
			(E/P) =	96.1		
			(A/P) =	88.6		
			(A/E) =	92.2		

(11)



*** GARMCO ALUMINIUM ROLLING MILL PROJECT ***

KOBE STEEL

COMMISSIONING SCHEDULE (REV. 2)

=====

TODAY : 21-AUG-85

PLOT TIME : 11:49 am

MIDAS ARTIMIS

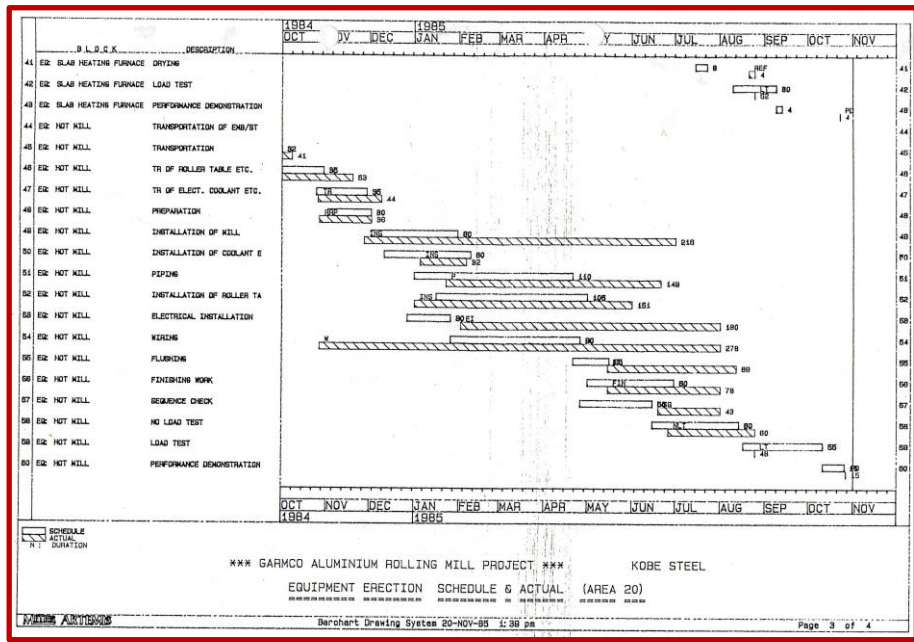
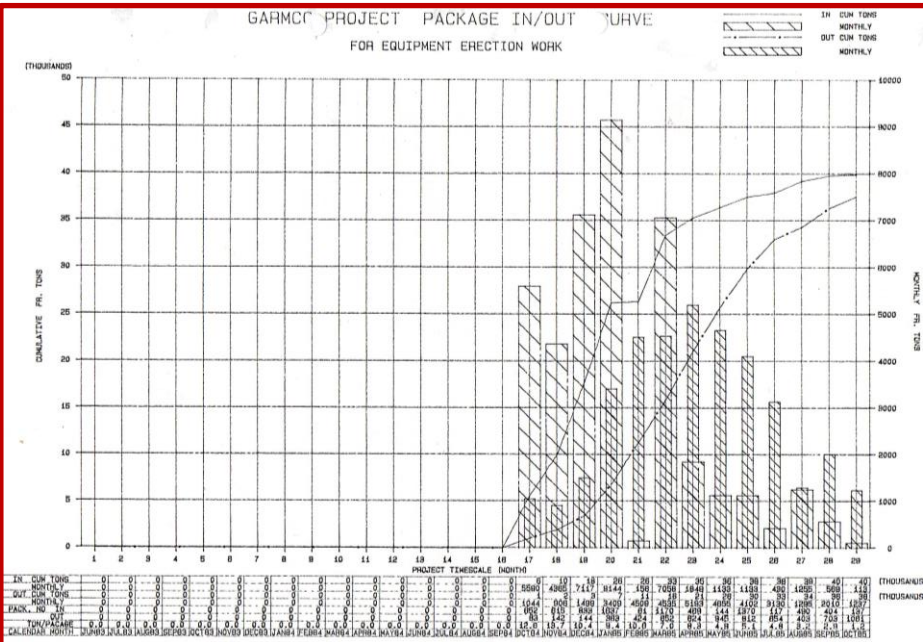
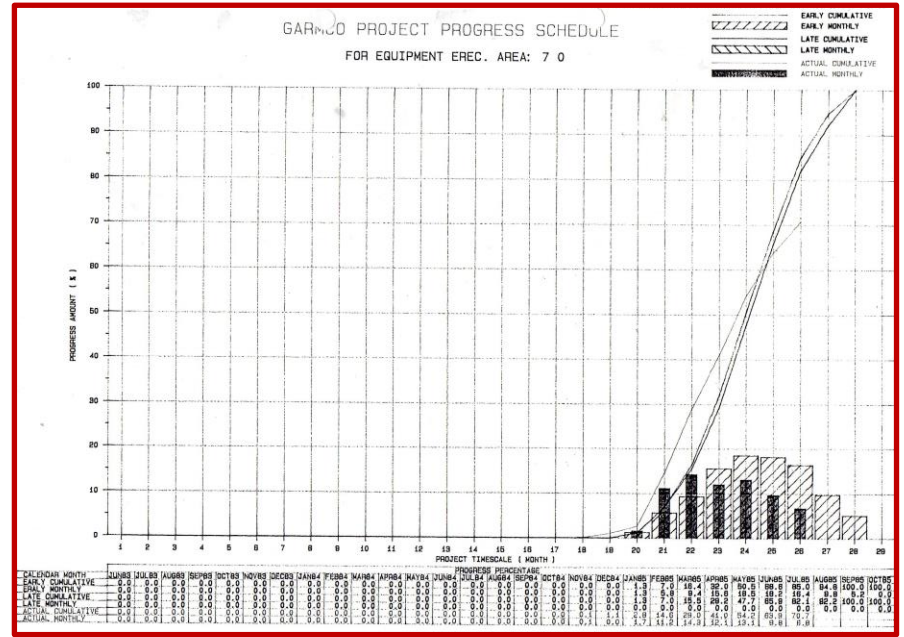
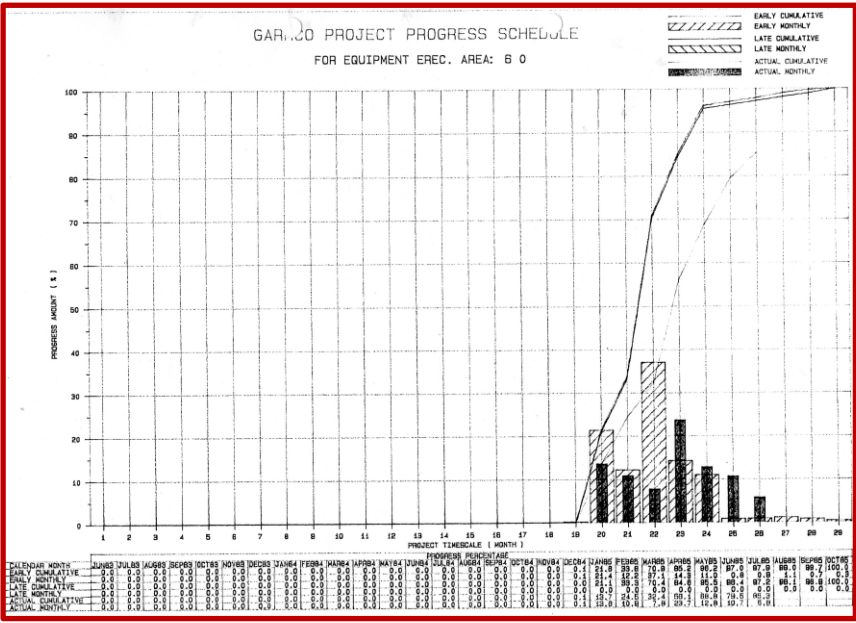
Barchart Drawing System 21-AUG-85 11:49 am

Page 1 of 2

			Du	ES	L _i	L _J	LF	Front
1130250	EQ: MELT & HOLD FURNACE	SEQUENCE CHECK	5	1-AUG-85	5-AUG-85	23-AUG-85	27-AUG-85	22
1130260	EQ: MELT & HOLD FURNACE	NO LOAD TEST	15	3-AUG-85	17-AUG-85	25-AUG-85	8-SEP-85	22
1130270	EQ: MELT & HOLD FURNACE	DRYING	26	22-AUG-85	16-SEP-85	9-SEP-85	4-OCT-85	18
1130290	EQ: MELT & HOLD FURNACE	LOAD TEST	15	17-SEP-85	1-OCT-85	5-OCT-85	19-OCT-85	18
1130300	EQ: MELT & HOLD FURNACE	PERFORMANCE DEMONSTRATION	4	2-OCT-85	5-OCT-85	27-OCT-85	30-OCT-85	25
1330180	EQ: CASTING STATION	SEQUENCE CHECK	1	10-AUG-85	10-AUG-85	18-SEP-85	18-SEP-85	39
1330200	EQ: CASTING STATION	NO LOAD TEST	16	11-AUG-85	26-AUG-85	19-SEP-85	4-OCT-85	39
1430160	EQ: GAS CONTROL	INSTALLATION	84	17-MAY-85	8-AUG-85	26-AUG-85	2-SEP-85	25
1430220	EQ: GAS CONTROL	SEQUENCE CHECK	3	8-AUG-85	10-AUG-85	26-AUG-85	28-AUG-85	18
1430230	EQ: GAS CONTROL	NO LOAD TEST	11	11-AUG-85	21-AUG-85	29-AUG-85	8-SEP-85	18
1430240	EQ: GAS CONTROL	LOAD TEST	10	17-SEP-85	26-SEP-85	21-OCT-85	30-OCT-85	34
2130130	EQ: BAND SAW	INSTALLATION	22	5-AUG-85	26-AUG-85	8-SEP-85	29-SEP-85	34
2130160	EQ: BAND SAW	SEQUENCE CHECK	15	17-AUG-85	31-AUG-85	20-SEP-85	4-OCT-85	34
2130170	EQ: BAND SAW	NO LOAD TEST	15	1-SEP-85	15-SEP-85	5-OCT-85	19-OCT-85	34
2130180	EQ: BAND SAW	LOAD TEST	10	2-OCT-85	11-OCT-85	20-OCT-85	29-OCT-85	18
2130190	EQ: BAND SAW	PERFORMANCE DEMONSTRATION	1	12-OCT-85	12-OCT-85	30-OCT-85	30-OCT-85	18
2230210	EQ: SLAB SCALPER	LOAD TEST	16	1-AUG-85	16-AUG-85	17-AUG-85	1-SEP-85	16
2230220	EQ: SLAB SCALPER	PERFORMANCE DEMONSTRATION	2	11-SEP-85	12-SEP-85	25-OCT-85	26-OCT-85	44
2330270	EQ: SLAB HEATING FURNACE	SEQUENCE CHECK	15	18-JUL-85	1-AUG-85	10-AUG-85	10-AUG-85	9
2330280	EQ: SLAB HEATING FURNACE	NO LOAD TEST	19	20-JUL-85	10-AUG-85	9-AUG-85	15-AUG-85	5
2330290	EQ: SLAB HEATING FURNACE	DRYING	7	11-AUG-85	17-AUG-85	16-AUG-85	22-AUG-85	5
2330300	EQ: SLAB HEATING FURNACE	LOAD TEST	20	15-AUG-85	3-SEP-85	20-AUG-85	8-SEP-85	5
2330310	EQ: SLAB HEATING FURNACE	PERFORMANCE DEMONSTRATION	4	13-SEP-85	16-SEP-85	27-OCT-85	30-OCT-85	44
2430280	EQ: HOT MILL	NO LOAD TEST	31	8-JUL-85	11-AUG-85	15-AUG-85	21-AUG-85	10
2430290	EQ: HOT MILL	LOAD TEST	55	17-AUG-85	10-OCT-85	22-AUG-85	15-OCT-85	5
2430300	EQ: HOT MILL	PERFORMANCE DEMONSTRATION	15	11-OCT-85	25-OCT-85	16-OCT-85	30-OCT-85	5
2530230	EQ: ROLL GRINDER	LOAD TEST	63	30-JUN-85	31-AUG-85	26-AUG-85	25-SEP-85	25
3130180	EQ: ANNEALING FURNACE	REFRACTORY WORK	100	8-MAY-85	15-AUG-85	12-AUG-85	26-AUG-85	11
3130220	EQ: ANNEALING FURNACE	SEQUENCE CHECK	2	9-AUG-85	10-AUG-85	21-AUG-85	22-AUG-85	12
3130230	EQ: ANNEALING FURNACE	NO LOAD TEST	10	11-AUG-85	20-AUG-85	17-AUG-85	26-AUG-85	6

訂正

3130250	EQ: ANNEALING FURNACE	LOAD TEST	30	27-AUG-85	25-SEP-85	1-SEP-85	30-SEP-85	5	
3130260	EQ: ANNEALING FURNACE	PERFORMANCE DEMONSTRATION	10	26-SEP-85	5-OCT-85	21-OCT-85	30-OCT-85	25	
3230290	EQ: COLD MILL	NO LOAD TEST	34	<u>21-JUL-85</u>	23-AUG-85	6-AUG-85	28-AUG-85	5	
3230300	EQ: COLD MILL	LOAD TEST OF ROUGHING	10	<u>24-AUG-85</u>	2-SEP-85	29-AUG-85	7-SEP-85	5	
3230310	EQ: COLD MILL	LOAD TEST OF INTERMED. & FINISH	25	6-SEP-85	30-SEP-85	11-SEP-85	5-OCT-85	5	
3230320	EQ: COLD MILL	PERFORMANCE DEMONSTRATION	10	1-OCT-85	10-OCT-85	21-OCT-85	30-OCT-85	20	
4130170	EQ: TENSION LEVELLER	INSTALLATION	91	15-MAY-85	13-AUG-85	18-AUG-85	30-AUG-85	17	
4130230	EQ: TENSION LEVELLER	SEQUENCE CHECK	5	<u>10-AUG-85</u>	<u>14-AUG-85</u>	27-AUG-85	31-AUG-85	17	
4130240	EQ: TENSION LEVELLER	NO LOAD TEST	20	<u>16-AUG-85</u>	4-SEP-85	1-SEP-85	20-SEP-85	16	
4130250	EQ: TENSION LEVELLER	LOAD TEST	30	<u>15</u>	16-SEP-85	15-OCT-85	21-SEP-85	20-OCT-85	5
4130260	EQ: TENSION LEVELLER	PERFORMANCE DEMONSTRATION	10	16-OCT-85	25-OCT-85	21-OCT-85	30-OCT-85	5	
4230130	EQ: SLITTING & EMBOSSING	INSTALLATION	69	8-JUN-85	15-AUG-85	7-AUG-85	21-AUG-85	6	
4230190	EQ: SLITTING & EMBOSSING	SEQUENCE CHECK	8	20-AUG-85	27-AUG-85	26-AUG-85	2-SEP-85	6	
4230200	EQ: SLITTING & EMBOSSING	NO LOAD TEST	23	<u>28-AUG-85</u>	19-SEP-85	3-SEP-85	25-SEP-85	6	
4230210	EQ: SLITTING & EMBOSSING	LOAD TEST	25	21-SEP-85	15-OCT-85	26-SEP-85	20-OCT-85	5	
4230220	EQ: SLITTING & EMBOSSING	PERFORMANCE DEMONSTRATION	10	16-OCT-85	25-OCT-85	21-OCT-85	30-OCT-85	5	
4330130	EQ: CUT-TO-LENGTH	INSTALLATION	57	20-JUN-85	15-AUG-85	15-AUG-85	29-AUG-85	14	
4330190	EQ: CUT-TO-LENGTH	SEQUENCE CHECK	13	26-AUG-85	7-SEP-85	5-SEP-85	17-SEP-85	10	
4330200	EQ: CUT-TO-LENGTH	NO LOAD TEST	18	<u>8-SEP-85</u>	25-SEP-85	18-SEP-85	5-OCT-85	10	
4330210	EQ: CUT-TO-LENGTH	LOAD TEST	24	26-SEP-85	19-OCT-85	6-OCT-85	29-OCT-85	10	
4330220	EQ: CUT-TO-LENGTH	PERFORMANCE DEMONSTRATION	10	11-OCT-85	20-OCT-85	21-OCT-85	30-OCT-85	10	
4430140	EQ: ROLL FORMER	INSTALLATION	30	29-JUL-85	27-AUG-85	20-AUG-85	15-SEP-85	19	
4430200	EQ: ROLL FORMER	SEQUENCE CHECK	10	1-SEP-85	10-SEP-85	17-SEP-85	26-SEP-85	16	
4430210	EQ: ROLL FORMER	NO LOAD TEST	14	<u>11-SEP-85</u>	24-SEP-85	27-SEP-85	10-OCT-85	16	
4430220	EQ: ROLL FORMER	LOAD TEST	10	<u>25</u>	26-SEP-85	5-OCT-85	11-OCT-85	20-OCT-85	15
4430230	EQ: ROLL FORMER	PERFORMANCE DEMONSTRATION	10	6-OCT-85	15-OCT-85	21-OCT-85	30-OCT-85	15	
4530130	EQ: SPECIAL EQ. & OTHERS	INSTALLATION	45	6-AUG-85	19-SEP-85	7-AUG-85	20-SEP-85	1	
4530160	EQ: SPECIAL EQ. & OTHERS	SEQUENCE CHECK	15	20-SEP-85	4-OCT-85	6-OCT-85	20-OCT-85	16	
4530170	EQ: SPECIAL EQ. & OTHERS	NO LOAD TEST	5	20-OCT-85	24-OCT-85	21-OCT-85	25-OCT-85	1	



*** GARMCO ALUMINIUM ROLLING MILL PROJECT ***
KOBEL STEEL

EQUIPMENT ERECTION SCHEDULE & ACTUAL (AREA 20)

DATA MAP

Sub-System

Output

Data Record

Input

No.

GARMCO PROJECT
Information System of Construction site

NETWORK / SCHEDULING

工事進行 Network, 日程, 実行計画 (M, W, D, Y) E/R, 迄実績と Input
L C.P.M 法で計算分析, Schedule chart
E 中心に, 別記アットアウト作成
最終版では Com. Schedule 作成
3: Progress curve or Target (E/L) の設定

C.P.P.R
Contract Progress Payment Report.

事前に設定した Measuring 方法にそって
工事進行実績 (土建, 配管, 架設, 進捗等)
Input, Progress Payment の計算請求
その各 Progress Curve 作成

PACS
Package Control Sys.

入船別: 梱包の登録, 量場の設定
工事進行に伴って: 搬出実績の記録
現量, 残 EA, 残庫の把握

MATIS
Material Inf. Sys.

工具, 消耗品の搬出実績
把握, 在庫管理

STAFF Inf.

日本人 staff, SV の登録, 改訂, 給与計算 (L staff)

Worker Inf.

取組, Formulation の Worker の把握

Vehicle Inf.

使用車載の予実集計と Rental fee

Expense Actual.

Site office の経費の集計

- ① Schedule Barchart
- ② Summary Barchart
- ③ 予実対比表 (Act.)
- ④ " " (Milestone)
- ⑤ Schedule Rep.
- ⑥ Progress curve [C&B, EQ Erection]
- ⑦ EQ-Progress Evaluation Rep
- ⑧ Commissioning Schedule

- ① C.P.P.R Report (C&B)
- ② " " (Equip)
- ③ EQ Detail
 - 月別総括表
 - 機械/電気/pip 別
 - Work Type 別別

- ① CARGO List (weight, length, ...)
- ② 梱包一覧表
- ③ 搬出予定表
- ④ " 実績表
- ⑤ 搬出 推移実績表

- ① 在庫引
- ② 搬出引

- ① Staff 名簿 (JAP.)
- ② " (Local)
- ③ 理人給与手
- ④ Worker 名簿
- ⑤ Manpower Report

- ① Vehicle 台帳
- ② " 使用予定 実績
- ③ Expense Actual (H, M, 期, 通期)

- Activity
- Earliest Start Date
- Latest " "
- Earliest Finish Date
- Latest " "
- Actual Start Date
- " Finish " - Act. Duration
- Resource (Equipment price.) (BA)

- Equipment No
- " (Ser.No.)
- Japan Price
- Local Price
- Eg. Name
- Net Weight

- Package No
- Equip No
- 品名
- Gross Weight
- M, Mant
- Dimension
- Package Style
- Ship. no

- No
- Name
- Date of Join
- Pass Port No
- Gate Pass-No
- Work Type
- Grade
- Foreman
- Nationality
- Birth of Date
- Basic Salary
- Vehicle No
- " NAME
- 使用車両
- 使用予定/実績

- ① Network Schedule
- Actual Date
- ③ Mileston Actual

- ① C&B Actual P/a
- ③ 機械別進捗%

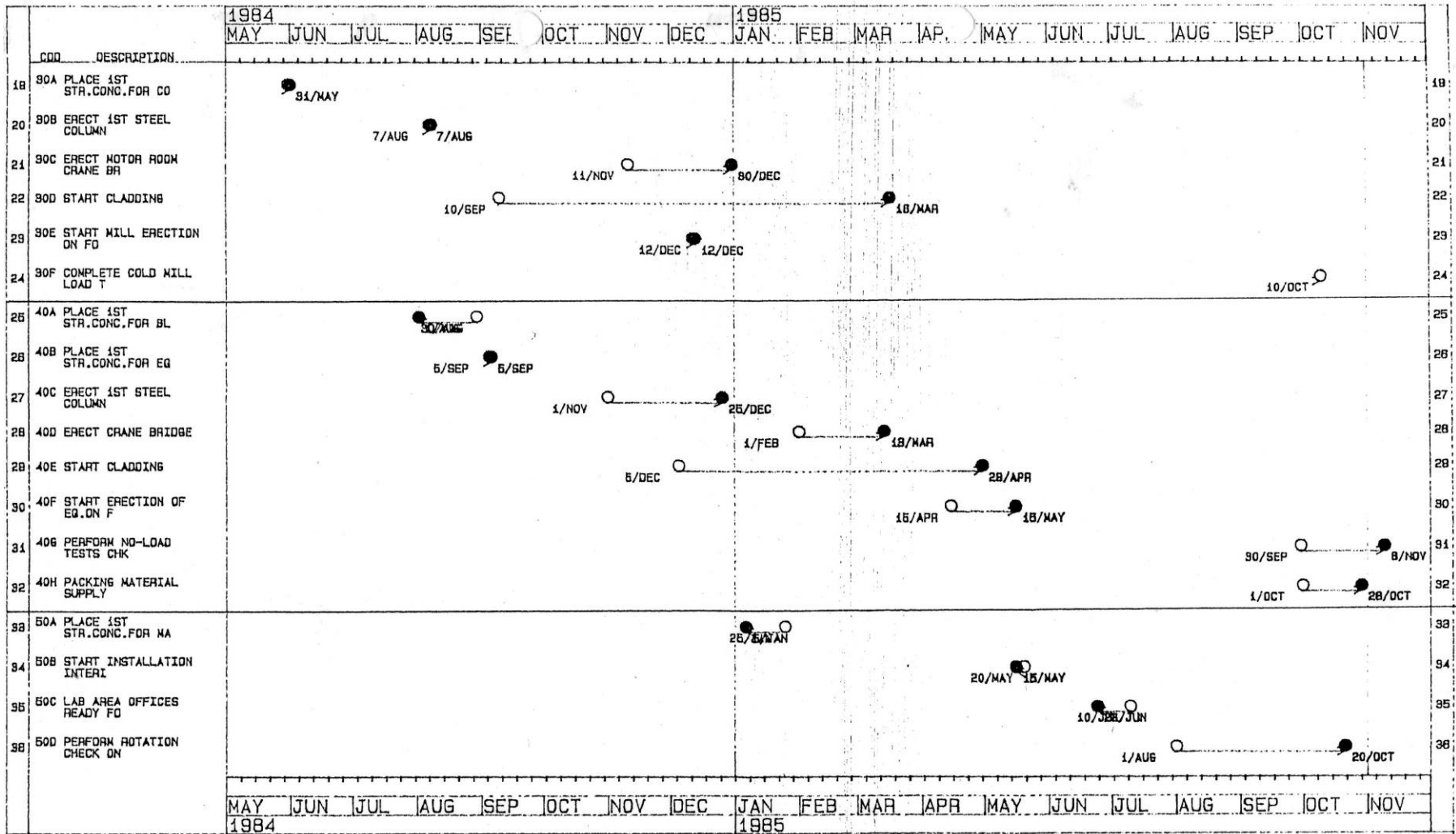
- ① 搬出実績
- ② " 予定
- ③ 未出引
- ④ 搬出把握, 引

- ① 搬出実績
- ③ Return "

- ① Nonpower 実績
- ① Worker 入, 退出別
- ① Vehicle 使用予定, 実績

注: 引は既存のもの
* 予実集計は必ず
使用する

下欄



○ ORIGINAL
● ACTUAL

*** GARMCO ALUMINIUM ROLLING MILL PROJECT ***

KOBE STEEL

MILESTONE SCHEDULE & ACTUAL

PAYED-OFF STATUS FOR PACKAGES

TOTAL FREIGHT TON = 40405.39
TOTAL NUMBER = 8397

PAYED-OFF DATE	DAILY FREIGHT TON	CUMULATIVE FREIGHT TON	CUMU. %	DAILY NUMBE	CUMU. NUMBER	CUMU. %
19-MAY-85	61.446	24154.598	59.78	16	3162	37.66
20-MAY-85	26.115	24180.713	59.85	24	3186	37.94
21-MAY-85	303.645	24484.358	60.60	35	3221	38.36
22-MAY-85	256.868	24741.226	61.23	19	3240	38.59
23-MAY-85	7.170	24748.396	61.25	2	3242	38.61
24-MAY-85	-	24748.396	61.25	-	3242	38.61
25-MAY-85	202.149	24950.545	61.75	35	3277	39.03
26-MAY-85	131.330	25081.875	62.08	25	3302	39.32
27-MAY-85	76.701	25158.576	62.27	22	3324	39.59
28-MAY-85	406.569	25565.145	63.27	29	3353	39.93
29-MAY-85	184.605	25749.750	63.73	23	3376	40.21
30-MAY-85	0.511	25750.261	63.73	1	3377	40.22
31-MAY-85	-	25750.261	63.73	-	3377	40.22
1-JUN-85	113.577	25863.838	64.01	69	3446	41.04
2-JUN-85	149.662	26013.500	64.38	16	3462	41.23
3-JUN-85	273.922	26287.422	65.06	64	3526	41.99
4-JUN-85	92.923	26380.345	65.29	18	3544	42.21
5-JUN-85	274.612	26654.957	65.97	35	3579	42.62
6-JUN-85	75.663	26730.620	66.16	16	3595	42.81
7-JUN-85	-	26730.620	66.16	-	3595	42.81
8-JUN-85	95.068	26825.688	66.39	11	3606	42.94
9-JUN-85	88.753	26914.441	66.61	23	3629	43.22
10-JUN-85	130.773	27045.214	66.94	54	3683	43.86
11-JUN-85	87.160	27132.374	67.15	17	3700	44.06
12-JUN-85	242.912	27375.286	67.75	23	3723	44.34
13-JUN-85	21.331	27396.617	67.80	6	3729	44.41
14-JUN-85	-	27396.617	67.80	-	3729	44.41
15-JUN-85	36.288	27432.905	67.89	9	3738	44.52
16-JUN-85	251.044	27683.949	68.52	24	3762	44.80
17-JUN-85	133.946	27817.895	68.85	56	3818	45.47
18-JUN-85	409.106	28227.001	69.86	19	3837	45.70
19-JUN-85	30.882	28257.883	69.94	11	3848	45.83
20-JUN-85	-	28257.883	69.94	-	3848	45.83
21-JUN-85	-	28257.883	69.94	-	3848	45.83
22-JUN-85	235.857	28493.740	70.52	45	3893	46.36
23-JUN-85	413.830	28906.770	71.54	38	3931	46.81
24-JUN-85	213.982	29120.672	72.07	48	3979	47.39
25-JUN-85	142.946	29263.618	72.43	22	4001	47.65
26-JUN-85	146.177	29409.795	72.79	19	4020	47.87
27-JUN-85	93.652	29503.447	73.02	3	4023	47.91
28-JUN-85	-	29503.447	73.02	-	4023	47.91
29-JUN-85	184.596	29688.043	73.48	109	4132	49.21
30-JUN-85	164.420	29852.463	73.88	57	4189	49.89
1-JUL-85	286.750	30139.213	74.59	29	4218	50.23
2-JUL-85	148.954	30288.167	74.96	22	4240	50.49
3-JUL-85	53.797	30341.964	75.09	63	4303	51.24

PAYED-OFF STATUS FOR PACKAGES

TOTAL FREIGHT TON = 40405.39
TOTAL NUMBER = 8397

PAYED-OFF DATE	DAILY FREIGHT TON	CUMULATIVE FREIGHT TON	CUMU. %	DAILY NUMBE	CUMU. NUMBER	CUMU. %
4-JUL-85	100.197	30442.161	75.34	41	4344	51.73
5-JUL-85	-	30442.161	75.34	-	4344	51.73
6-JUL-85	171.202	30613.363	75.77	21	4365	51.98
7-JUL-85	198.997	30812.360	76.26	157	4522	53.85
8-JUL-85	357.711	31170.071	77.14	29	4551	54.20
9-JUL-85	32.969	31203.040	77.23	15	4566	54.38
10-JUL-85	60.351	31263.391	77.37	16	4582	54.57
11-JUL-85	41.207	31304.598	77.48	13	4595	54.72
12-JUL-85	-	31304.598	77.48	-	4595	54.72
13-JUL-85	112.186	31416.784	77.75	16	4611	54.91
14-JUL-85	368.682	31785.466	78.67	48	4659	55.48
15-JUL-85	80.568	31866.034	78.87	14	4673	55.65
16-JUL-85	15.222	31881.256	78.90	1	4674	55.66
17-JUL-85	127.232	32008.488	79.22	18	4692	55.88
18-JUL-85	60.261	32068.749	79.37	14	4706	56.04
19-JUL-85	-	32068.749	79.37	-	4706	56.04
20-JUL-85	302.584	32371.333	80.12	23	4729	56.32
21-JUL-85	57.882	32429.215	80.26	22	4751	56.58
22-JUL-85	27.003	32456.218	80.33	12	4763	56.72
23-JUL-85	65.488	32521.706	80.49	12	4775	56.87
24-JUL-85	99.415	32621.121	80.74	9	4784	56.97
25-JUL-85	13.304	32634.425	80.77	9	4793	57.08
26-JUL-85	-	32634.425	80.77	-	4793	57.08
27-JUL-85	97.910	32732.335	81.01	11	4804	57.21
28-JUL-85	52.001	32784.336	81.14	16	4820	57.40
29-JUL-85	161.300	32945.636	81.54	11	4831	57.53
30-JUL-85	19.485	32965.121	81.59	7	4838	57.62
31-JUL-85	16.885	32982.006	81.63	5	4843	57.68
1-AUG-85	121.754	33103.760	81.93	64	4907	58.44
2-AUG-85	-	33103.760	81.93	-	4907	58.44
3-AUG-85	31.225	33134.985	82.01	24	4931	58.72
4-AUG-85	39.911	33174.896	82.11	36	4967	59.15
5-AUG-85	57.874	33232.770	82.25	13	4980	59.31
6-AUG-85	35.379	33268.149	82.34	22	5002	59.57
7-AUG-85	-	33268.149	82.34	-	5002	59.57
8-AUG-85	19.557	33287.706	82.38	6	5008	59.64
9-AUG-85	-	33287.706	82.38	-	5008	59.64
10-AUG-85	27.130	33314.836	82.45	1	5009	59.65
11-AUG-85	161.579	33476.415	82.85	14	5023	59.82
12-AUG-85	64.134	33540.549	83.01	38	5061	60.27
13-AUG-85	15.101	33555.650	83.05	6	5067	60.34
14-AUG-85	135.008	33690.658	83.38	9	5076	60.45
15-AUG-85	98.806	33789.464	83.63	9	5085	60.56
16-AUG-85	-	33789.464	83.63	-	5085	60.56
17-AUG-85	7.343	33796.807	83.64	11	5096	60.69
18-AUG-85	87.000	33883.807	83.86	5	5101	60.75

***** K S I SITRA OFFICE S T A F F L I S T *****

SECTION	COMPANY	HANNO	FULL NAME	DATE OF JOINED	ASSIGNMEN END DATE	DATE OF BIRTH	PLACE OF BIRTH	SOCIAL INS NUMBER	
1	SV	IHI	IH001	T. SHTONOYA	10-JAN-85	31-OCT-85	11-NOV-25	HIROSHIMA	1274145
2	SV	CHUGAI	CH001	T. INACAKI	24-JAN-85	31 OCT-85	14-JUL-44	NIE	1274161
3	SV	HITACHI	HI001	G. TAKI	19-JAN-85	31-AUG-85	9-JAN-39	IBARACT	1274159
4	SV	HITACHI	HI002	K. OKAMOTO	7-FEB-85	6-MAY-85	27 AUG-51	IBARACT	1274169
5	SV	TOSHIBA	TO001	T. SHIMIZU	24-FEB-85	30-JUN-85	17-MAY-46	TOKYO	
6	SV	TOSHIBA	TO002	Y. OKUZIUKI	24-FEB-85	15-MAR-85	14 NOV-38		
1	7C5	KSL	15914	H. NAKAYAMA	5-AUG-85	31-MAR-86	1-MAY-60	HYOGO	
1	7N1	KSL	04109	H. AKEDO	7-DEC-83	30-NOV-85	8-MAR-39	OSAKA	1274101
2	7N1	KSL	07445	M. OKANO	2-NOV-84	30-NOV-85	22 JAN-31	HYOGO	1274123
3	7N1	KSL	09556	I. KOMEDA	5-NOV-84	30-NOV-85	29-APR-41	TOKYO	1274136
4	7N1	KSL	10572	S. TANAKA	7-DEC-83	31-DEC-85	24-MAR-48	KAGAWA	1274102
5	7N1	KSL	15641	H. MATSUOKA	9-DEC-83	30-NOV-85	15-APR-58	FUKUOKA	1274104
1	7N2	ITS	IT001	T. IKEDA	28-SEP-83	31-OCT-85	6-NOV-27	FUKUOKA	1274106
2	7N2	KSL	05823	K. TOMOHIRO	24-JUL-84	31-JUL-85	10-FEB-40	HYOGO	1274125
3	7N2	KSL	11204	Y. YAMAGATA	14-MAR-84	31-OCT-85	14-DEC-44	FUKUJ	1274103
4	7N2	KSL	13567	E. UNO	29-DEC-83	31-OCT-85	13-JUL-51	OKAYAMA	1274105
5	7N2	KSL	15802	H. DOJ	4-MAY-84	31-MAY-85	4-AUG-58	HIROSHIMA	1274107
6	7N2	NIKKEN	NI002	S. SHIRAIISHI	9-NOV-84	31-MAR-85	17-AUG-51	OSAKA	
1	7N3	HPC	HP001	Y. HAGA	1-NOV-84	31-OCT-85	28-SEP-47	FUKUSHIMA	1274118
2	7N3	HPC	HP002	F. WATANABE	1-NOV-84	30-NOV-85	10-AUG-57	YAMAGATA	1274124
3	7N3	HPC	HP003	K. KUDO	1-NOV-84	30-NOV-85	19-APR-59	IWATE	1274120
4	7N3	HPC	HP004	S. KANDA	10-JAN-85	31-OCT-85	2-MAY-61	NIIGATA	1274149
5	7N3	HPC	HP005	Y. KAJIWARA	10-JAN-85	31-OCT-85	1-DEC-61	KUMAMOTO	1274147
6	7N3	KSL	04920	T. YATA	6-DEC-84	31-OCT-85	22-APR-43	OHITA	1274144
7	7N3	KSL	04961	M. TAKEUCHI	6-DEC-84	31-OCT-85	15-APR-42	TOTTORI	1274139
8	7N3	KSL	05672	K. TERAO	21-SEP-84	30-NOV-85	19-MAR-37	HYOGO	1274113
9	7N3	KSL	06938	Y. KANNO	11-NOV-84	30-NOV-85	25-APR-43	JAPAN	1274112
10	7N3	KSL	10645	F. SUZUKI	10-NOV-84	30-NOV-85	1-JAN-46	OSAKA	1274137
11	7N3	KSL	14950	S. MATSUSHITA	19-MAR-85		26-OCT-55	KYOTO	
12	7N3	KSL	43033	T. EGASHIRA	7-FEB-85	15-OCT-85	22-AUG-49	HYOGO	1274165
13	7N3	KSL	47230	Y. HAMADA	7-FEB-85	15-AUG-85	15-FEB-55	NAGASAKI	1274170
14	7N3	KSL	47725	H. ARAMAKI	10-JAN-85	30-SEP-85	2-MAY-49	HYOGO	1274157
15	7N3	KSL	83101	Y. ESAKI	11-NOV-84	15-OCT-85	8-NOV-49	KUMAMOTO	1274134
16	7N3	KSL	85714	K. TANAKA	6-DEC-84	15-OCT-85	14-AUG-42	HYOGO	1274138
17	7N3	KSL	86100	T. MORIMOTO	6-DEC-84	15-AUG-85	16-JUL-41	KUMAMOTO	1274140
18	7N3	KSL	93298	S. TAGAWA	11-NOV-84	15-OCT-85	3-DEC-51	KUMAMOTO	1274135
19	7N3	KSL	93948	K. IIDA	25-APR-85				
20	7N3	KSL	95797	H. SATO	6-DEC-84	30-SEP-85	3-DEC-57	NAGASAKI	1274141
21	7N3	SPC	SP001	H. ABO	10-AUG-84	31-OCT-85	8-APR-33	HYOGO	1274126
22	7N3	SPC	SP002	H. MAEKAWA	11-MAY-84	14-NOV-85	14-JUL-47	HYOGO	1274108
23	7N3	SPC	SP003	F. KIHURA	27-SEP-84	31-OCT-85	12-MAY-47	HYOGO	1274111
24	7N3	SPC	SP004	A. MATSUMOTO	12-NOV-84	31-OCT-85	18-JUN-61	OKAYAMA	1274121

***** K S I SITRA OFFICE S T A F F L I S T *****

SECTION	COMPANY	MANN0	FULL NAME	DATE OF JOINED	ASSIGNMEN END DATE	DATE OF BIRTH	PLACE OF BIRTH	SOCIAL INS NUMBER	
25	7N3	SPC	SP005	M. OMORI	6-DEC-84	31-OCT-85	9-OCT-37	FUKUOKA	1274142
26	7N3	SPC	SP006	T. NAKAE	6-DEC-84	30-SEP-85	24-NOV-56	FUKUOKA	1274143
27	7N3	SPC	SP007	S. AKAHOSHI	20-DEC-84	31-AUG-85	18-NOV-49	KUMAMOTO	1274150
28	7N3	SPC	SP008	N. SHINMURA	10-JAN-85	31-OCT-85	30-APR-50	KAGOSHIMA	1274155
29	7N3	SPC	SP009	Y. SASAKI	10-JAN-85	31-AUG-85	10-MAR-51	FUKUOKA	1274146
30	7N3	SPC	SP010	Y. TOYONAGA	10-JAN-85	31-OCT-85	1-JAN-31	FUKUOKA	1274156
31	7N3	SPC	SP011	Y. YOSHITANI	7-FEB-85	31-OCT-85	27-DEC-49	SAGA	1274164
32	7N3	SPC	SP012	T. MIYAKI	10-JAN-85	31-OCT-85	19-JUL-51	FUKUOKA	1274154
33	7N3	SPC	SP013	J. SOTOKAWAUCH	7-FEB-85	31-OCT-85	8-JAN-45	KAGOSHIMA	1274166
34	7N3	SPC	SP014	Y. TSUTSUI	7-FEB-85	31-OCT-85	5-SEP-43	OSAKA	1274168
35	7N3	SPC	SP015	T. SAKAKIHARA	7-FEB-85	31-MAY-85	23-JAN-45	SHIZUOKA	
36	7N3	WAT	WA001	K. WATANABE	20-DEC-84	31-JUL-85	30-NOV-51	HYOGO	1274152
37	7N3	MIWA	MW001	K. MARI	27-SEP-84	31-OCT-85	12-APR-45	HYOGO	1274114
38	7N3	MIWA	MW002	T. YAMANE	27-SEP-84	31-OCT-85	11-FEB-36	HYOGO	1274128
39	7N3	MIWA	MW003	S. KADONO	1-NOV-84	31-OCT-85	22-OCT-50	HYOGO	1274119
40	7N3	OSAKA	OD001	T. MAEDA	11-MAY-84	15-NOV-85	15-SEP-37	KAGOSHIMA	1274109
41	7N3	OSAKA	OD002	M. SATAKE	4-OCT-84	31-OCT-85	2-APR-42	TOKYO	1274129
42	7N3	OSAKA	OD003	R. OTA	9-NOV-84	31-OCT-85	23-JAN-57	OKAYAMA	1274122
43	7N3	OSAKA	OD004	T. YAMASHITA	20-DEC-84	31-OCT-85	26-AUG-55	OSAKA	1274151
44	7N3	OSAKA	OD005	F. SASAKI	10-JAN-85	31-OCT-85	14-NOV-31	SHIMANE	1274148
45	7N3	OSAKA	OD006	H. SASAKI	24-JAN-85	30-NOV-85	4-SEP-50	GUNMA	1274160
46	7N3	OSAKA	OD007	Y. OKI	20-DEC-84	31-OCT-85	18-APR-56	KYOTO	1274153
47	7N3	SANKYU	SQ001	Y. TSUDA	11-OCT-84	31-OCT-85	18-DEC-33	MIYAGI	1274115
48	7N3	SANKYU	SQ002	M. HIROTA	4-OCT-84	31-OCT-85	27-APR-38	NIIGATA	1274130
49	7N3	SANKYU	SQ003	T. YOKOYAMA	4-OCT-84	30-SEP-85	1-FEB-38	KUMAMOTO	1274131
50	7N3	SANKYU	SQ004	T. ISHII	4-OCT-84	31-AUG-85	10-NOV-39	NIIGATA	1274132
51	7N3	SANKYU	SQ005	Y. WAKAMATSU	4-OCT-84	31-AUG-85	10-JUN-51	FUKUSHIMA	1274133
52	7N3	SANKYU	SQ006	M. MURAKAMI	31-JAN-85	31-MAY-85	6-DEC-51	EHIME	1274162
53	7N3	SANKYU	SQ007	S. MORI	31-JAN-85	31-MAY-85	27-OCT-37	NAGASAKI	1274163
1	7N4	KSL	03274	Y. KAMEYAMA	15-FEB-85		11-SEP-40		
2	7N4	KSL	03468	K. KOZONO	4-JUL-85				
3	7N4	KSL	03555	T. OZAKI	20-APR-85		13-SEP-37	OSAKA	
4	7N4	KSL	04323	T. OBOKATA	16-APR-85		20-JUL-41	GUNMA	
5	7N4	KSL	10209	Y. ITO	20-JUN-85		7-NOV-42		
6	7N4	KSL	11411	T. KIRIYAMA	4-JUL-85				
7	7N4	KSL	15251	K. WATANABE	16-APR-85		13-JUN-55	KUMAMOTO	
8	7N4	KSL	16028	T. SUWA	7-FEB-85		11-FEB-50	HYOGO	1274167
9	7N4	KSL	34931	S. MAWATARI	3-JUL-85				
10	7N4	KSL	35519	N. TOGO	18-APR-85		12-MAY-40	OHITA	
11	7N4	KSL	35633	T. OKIMOTO	2-MAY-85		7-MAR-39	HIROSHIMA	
12	7N4	KSL	35860	S. TERAYAMA	2-MAY-85				
13	7N4	KSL	38456	H. MIYAZAKI	4-JUN-85		1-MAR-33		
14	7N4	KSL	39213	T. ISHIKAWA	6-JUN-85		28-OCT-44	FUKUOKA	
15	7N4	KSL	40173	KEN TANAKA	6-JUN-85		8-FEB-47	FUKUOKA	
16	7N4	KSL	41611	M. BARA	2-MAY-85		2-MAY-48	F	
17	7N4	KSL	43658	S. HANADA	6-JUN-85		27-NOV-49	FUKUOKA	

SECTION	COMPANY	MANNO	FULLNAME	DATE OF JOINED	ASSIGNMEN END DATE	DATE OF BIRTH	PLACE BIRTH
2	7N4	KSL	78975	Y. MIMURA	3-JUL-85		
3	7N4	KSL	79108	T.HISHINUMA	2-MAY-85		
4	7N4	KSL	79348	T.ARAI	20-JUN-85	10-AUG-54	HOKKAIDO
5	7N4	KSL	79366	Y. HASEGAWA	3-JUL-85		
6	7N4	KSL	79738	S.KITANO	20-JUN-85	3-MAY-55	HOKKAIDO
7	7N4	KSL	79739	K. OHYAMA	3-JUL-85		
8	7N4	KSL	79783	T.HATAZAWA	6-JUN-85	3-JUN-54	AKITA
9	7N4	KSL	79793	T.ICHIMURA	6-JUN-85	27-MAR-56	IBARAKI
10	7N4	KSL	79815	M.OSANAI	20-JUN-85	1-JUL-55	HOKKAIDO
11	7N4	KSL	79892	Y.ISHII	20-JUN-85	3-FEB-57	IBARAKI
12	7N4	KSL	86930	K. KARAMATU	3-JUL-85		
13	7N4	KSL	94356	N. NAGASE	3-JUL-85		

T O T A L : 104 NIN

AEROGRAMME

航空書簡

(27)



ATTN: MR Takayosi Yada
40 Kobe Steel Ltd
P.O. BOX 1148
MANAMA. BAHRAIN

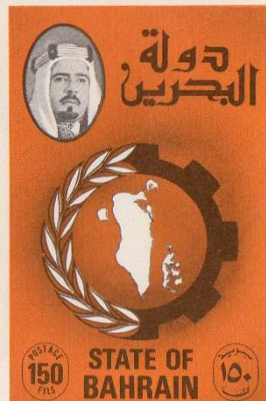
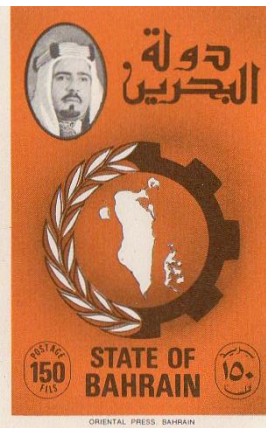
差出人住所氏名郵便番号
Sender's name, address and postal code

From Kiyoko Yada
三木市緑が丘町東 4-13-16

郵便番号
POSTAL CODE 673-05 JAPAN

この郵便物には なにも入れたりはり付けたりすることができません
Nothing may be contained in or attached to this letter.





バーレーン・現地工事 時代

1984.12～1985.12

娯楽室

テニスコート

シトラ・キャンプ

風呂場・洗濯場・トイレ

食堂

エントランス

カラオケ

娯楽室

送別会

明渡所長

豊永さん

新村さん

海外工場建設工事 in Bahrain

1994～1996年の28ヶ月間の工事
中近東の島国 バーレーンでアルミ圧延工場を
神戸製鋼が建設した。

GARMCO (バーレーン、サウジ、イラン、イラク、オマーン、クエート)
コンサル:カイザーエンジニアリング

私は、1994. 12～1995. 12のジャスト1年間
現地工事管理システム運用(スケジュール管理、支払い
請求、マテリアル、Worker管理)で赴任

最初の6ヶ月間は、一生懸命に仕事した。プロジェクトの
ことも、アルテミス(ソフトウェア)のことも熟知していなかつたため、このコンピュータ室で一人で頑張った。

仕事も、キャンプでの生活、休日でのマナマ市街ショッピング
など楽しい思い出が沢山ある。ハッピーな一時期である

夜は毎日なにをしていたか？

麻雀が50%、小宴会が30%、カラオケ3%、ビデオ5%、
マナマ市街で食事会が5%、その他5% といったところ

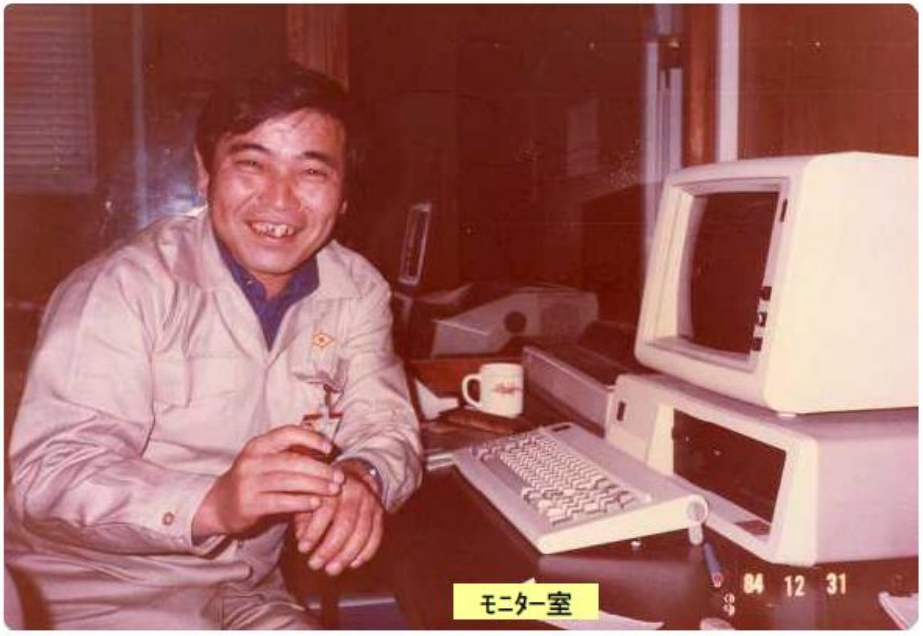
GARMCO工場建設中



外は、40~50℃と猛暑でもコンピュータ空調のためほぼ25℃に保たれていた。1年中この部屋で一人での作業が殆どだった。

コンピュータ室

コンピュータ室での仕事が70%、事務所での仕事が15%、建設中の工場での仕事(パトロール、見学)が10%、他5%





高速道路

砂漠



マナマ中心街

赴任中、雨が少なく3ヶ月間も降らなかったことがある。植物が生えているところは少ない。首都マナマ市街で少し見る事が出来る。土漠地帯が殆どである。



ナツメヤシ

バーレーンの気温は12月～1月にかけての最低気温が5～7℃ 最高気温は8～9月の昼で45～50℃になる12月でも昼はプールで泳ぐことが出来る。



マナマ中心街



森本さん

竹内さん

1983年8月28日

SATURDAY TO WEDNESDAY		土曜～水曜	
MORNING 朝	NOON 1 昼	NOON 2 昼	AFTERNOON 午後
CAMP TO OFFICE	OFFICE TO CAMP	CAMP TO OFFICE	OFFICE TO CAMP
06:15	11:45	12:35	16:40
06:30	12:00	12:50	17:10
06:45	12:15	13:05	17:40
			18:10 (2)
			18:25 (2)
			18:40 (2)
			19:10
THURSDAY		木曜	
MORNING 朝	NOON 1 昼	NOON 2 昼	AFTERNOON 午後
AS ABOVE 同上	AS ABOVE 同上	AS ABOVE 同上	14:40
			15:10
			15:40
			16:10 (2)
			16:25 (2)
			16:40 (2)
			17:10
SHOPPING THURSDAY		木曜	
17:00 CAMP	17:30 CAMP	17:50 CAMP	18:40 CAMP
17:10 GOLF	17:40 GOLF	18:00 GOLF	18:50 GOLF
17:20 ORIENTAL	17:50 ORIENTAL	18:00 ORIENTAL	19:00 ORIENTAL
17:30 REGENCY	18:00 REGENCY	18:20 REGENCY	19:10 REGENCY
	18:10 ORIENTAL	18:30 ORIENTAL	19:20 ORIENTAL
	18:20 GOLF	18:40 GOLF	19:30 GOLF

買い物又は当分のコース決定まで進行は等しい申請に依り変更勤務が原則。

斗う夢の球宴 (早朝VTR大会)

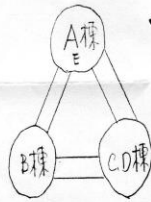
休日、出勤前にVTR大会(早朝) 幹事 天田

① 形式 A棟、B棟、C&D棟 対抗戦

② 期間 6月28日(金)～8月2日(金)
[11時～朝 6:30～7:30]

③ 場所 キャンテ横 広場

④ 対戦



(各2回当り)

日	対戦	審判
6/28	A ^E -B	C/D
7/5	B-CD	A ^E
/12	CD-A ^E	B
/19	A ^E -B	C/D
/26	B-CD	A ^E
8/2	CD-A ^E	B

⑤ 1=7" 5回 (ただし、1時間と週に新しい1=7"は入らない)

⑥ 順位
① 勝敗(率)の良い順
② 同-の場合は得失点差

⑦ 参加人数
各棟(チーム)15人以上 何人でもよい。(準備は9:00)

⑧ ハンテ
9人未満だと試合可、ただし1人欠けは不可

⑨ 6月28日(金) 決

6:00 集合 (A、B棟チーム)
6:05 準備開始
6:10 開会式
6:15 始球式
6:30 試合開始

⑩ 1L-1V (O:あり, X:なし)

- ① 2D-ピッチ式
- ② 四球' X
- ③ 三振 O
- ④ ハンテ O
- ⑤ 盗塁 X
- ⑥ 7-7-7-7-7-7 X
- ⑦ 1-1-1-1-1-1-7 X
- ⑧ 3-1-1-1-1-1 X
- ⑨ 棄権 15-0 (買付)
- ⑩ 1-1-1-1-1-1-1 (1-1-1-1-1-1)

離塁は投手投球が打者のバットに及ぶまで
1-1-1-1-1-1-1 上を通過するまで不可

⑪ 会費 500円/人

⑫ 表彰 優勝、準優勝、3位、(レギュラー決定)

⑬ 注意 ① 試合前の準備運動
② 道具の準備、広場のあきかき

参加者、下記に記入下さい

(参加者が多い場合は
チーム数を考慮して)

A ^E 棟	B棟	C、D棟

早朝ソカホ-ル勝敗表(終了)

順位	チーム	勝敗	得点	失点	対戦			賞品 (ポイント)
					B・F	C・D	A・E	
優勝	B.F	4-0	44	18	○	○	○	26 ^本
2位	C.D	1-3	34	33	●	○	○	16 ["]
3位	A.E	1-3	17	40	●	○	○	11 ["]

会場

A・E 10^分 = 5^分 BD
 B・F 11^分 = 5^分 BD
 C・D 11^分 = 5^分 BD

①

16^分 BD

賞品

優勝チーム ① × 0.5 = 8^分 BD
 2位 * × 0.3 = 4^分 BD
 3位 * × 0.2 = 3^分 BD

賞品

優勝チーム ① × 0.5 = 8^分 BD (計 26)
 2位 * × 0.3 = 4^分 BD (計 16)
 3位 * × 0.2 = 3^分 BD (計 11)

先週の結果

得点表

7月19日

チーム	1	2	3	4	5	計
C.D	3	0	3	3	6	15
A.E	1	0	0	0	0	1

次週は 主審 滝天田
 A.E 棟 対 B.F 棟 です。

7月9日~8月8日

二回無記入のこぼれ集計用

麻雀集計結果

DATE NAME	B.D	
小島	+224 +11.0	← 吉住 (11.0)
田尻	+177 +8.5	← 龜山 (7.5), 用上 (1.0)
桑原	+170 +8.5	← 松島 (5.0), 吉住 (3.5)
伊藤	+148 +7.0	← 榎原 (6.0), 大山 (1.0)
外内	+134 +6.5	← ... 圓真 (1.5)
天田	+90 +4.5	← 赤星 (3.5), 榎原 (1.0)
鎌倉	+79 +3.5	← 明波 (3.0), 用上 (0.5)
吉谷	+77 +3.5	← 赤星 (3.0), 榎原 (0.5)
榎垣	+51 +2.5	← 早田 (2.5)
三山	+46 +2.0	← 高波 (2.0)
榎村	+38 +1.5	← 大富 (1.5)
三村	+34 +1.5	← 米田 (1.5)
鈴木	+29 +1.0	← 田中 (1.0)
菱沼	+24 +1.0	← 寺山 (1.0)
杉原	+22 +1.0	← 大田原 (1.0)
田川	+21 +1.0	← 桐山 (1.0)
筒井	+13 +0.5	← 近藤 (0.5)
服部	+13 +0.5	← 榎原 (0.5)

※ 前回の分帳お済みですか?
 ※ 席次は出たままです。お早目に!

7月9日~8月9日

二回無記入のこぼれ集計用

麻雀集計結果

DATE NAME	B.D	
吉住	-292 -14.5	→ 小島 (11.0), 桑原 (3.5)
龜山	-152 -7.5	→ 田尻 (7.5)
榎原	-128 -6.0	→ 伊藤 (6.0)
松島	-103 -5.0	→ 桑原 (5.0)
外内	-72 -3.5	→ 外内 (3.5)
大山	-92 -4.5	→ 天田 (3.5), 伊藤 (1.0)
赤星	-66 -3.0	→ 吉谷 (3.0)
明波	-64 -3.0	→ 鎌倉 (3.0)
早田	-54 -2.5	→ 榎垣 (2.5)
榎原	-42 -2.0	→ 天田 (1.0), 吉谷 (0.5), 服部 (0.5)
大富	-39 -1.5	→ 榎村 (1.5)
米田	-34 -1.5	→ 三村 (1.5)
圓真	-32 -1.5	→ 外内 (1.5)
用上	-31 -1.5	→ 田尻 (1.0), 鎌倉 (0.5)
田中	-27 -1.0	→ 鈴木 (1.0)
寺山	-27 -1.0	→ 菱沼 (1.0)
大田原	-24 -1.0	→ 杉原 (1.0)
桐山	-22 -1.0	→ 田川 (1.0)
近藤	-10 -0.5	→ 筒井 (0.5)
大森	-4 -	
岩田	-4 -	
飯田	-3 -	
高波	-45 -2.0	→ 三山 (2.0)

'84. 12. 20

矢田 主幹 殿



無事着任し、元気にバリバリご活躍の由、何れも嬉しく思っております。

既にご高承の1/1付所属変更は、just for procedure's sake、Pjtの負担が@8000/hではtoo muchに過ぎ実費チャージとするのが狙い、他意は全くござらぬが、従前不変と思っております。

オニに笑われる話。帰任については貴殿の判断に拠ることとしますので宜敷お願いします。

(イ) 一気通貫で終りまでや、その方が良いのか？

(ロ) 途中で交替要員を送る方が良いのか？

(ハ) や>こしい仕かけは半年位であらうか整理し尽し、あとは残留者に託しても十分やれる。従って交替要員なしで帰任できることになるのかどうか？

(ニ) その他、もしあれば、何れもご相談下り。

ご家族のこと、ずい分とご心配のことかと案ぜられますが、手紙は出しましたか。吉田様を通じ折にふれてTel.させて貰っています。FAXのそぞれは、何事によらず、手取り早く仲継致しますので、ご利用下り。

貴地には矢田氏ではなく Mr. Yada が活躍している様様、大変に嬉しく思っております。良い年を！ 豆々

2/2

24-2-85

BUS TIME-TABLE

次に変更通知をお知らせは毎週木요일は、下記のスケジュールでバスを運行致します。ご協力よろしくお願い致します。

FOLLOWING BUS TIME TABLE FOR THURSDAYS REMAINS UNCHANGED UNTIL FURTHER NOTICE.

CC: GM, SOC, SOA
SOE,
MEETING ROOM
BULLETIN BOARD
CANTEEN
DRIVERS.

1 OFFICE TO CAMP

14:10

14:40

15:10

15:40

16:10

16:40

17:10

16:10

16:40

2 SHOPPING

17:30 CAMP → REGENCY 18:00

↓ 18:20
ORIENTAL MARKET

↓
GULF 18:40

↓
CAMP

19:00 CAMP → REGENCY 19:30

↓ 20:00
ORIENTAL MARKET

↓
CAMP

17:00 CAMP → GULF HOTEL

↓
REGENCY

↓
ORIENTAL MARKET

↓
CAMP

17:50 CAMP → GULF HOTEL 18:10

↓ 18:30
REGENCY

↓ 19:00
ORIENTAL MARKET

↓
CAMP