Table 3-5 Facility Plan (New Machine Tool) (41/43)

NO.	FACILITY	DESCRIPTION		BASIS OF PLAN	REMARKS
FA-1	Fitting & Assembly tools	Fitting and Assembly Tools (Cont'd)			
		. Open ended spanners with double end type (5.5 x 7 - 55 x 60 mm)	(10 sets)		
		. Open ended spanners with single end type (5.5 - 38 mm)	(10 sets)		
		. 6 set wrench (5.5 x 7 - 22 x 24 mm)	(10 sets)		
		(4) Electrical and pneumatic tools	1 set		
		. Portable electric drill (5 - 32 mmø)	(2 sets)		
		. Disc grinder (100 - 205 mmø)	(2 sets)		
		. Portable electric grinder (100 mmø, 125 mmø)	(2 sets)		
		. Grinding wheels	(40 pcs)		
		(5) Hydraulic tools	1 set		
		. Hydraulic jack with detached pump (20 tons, 30 tons, 50 tons)	(4 x 3 sets)		
		. Hydraulic oil jack (2, 5, 7, 10, 15, 20, 50 tons)	(4 x 7 sets)		
		(6) Other tools	1 set		
		. Spur geared chain hoist (1/2, 1, 1-1/2, 2, 3, 5, 10 tons)	(7 x 2 sets)		
		. Ratchet lever hoist (3/4, 1-1/2, 3, 6 tons)	(4 x 2 sets)		
PT-1	Plate working tools (1 set)	Plate working tools		Required for the efficiency improvement in plate work.	
		(1) Gas cutting & welding tools	1 set		
		. Cutting trestle (2,500 mm W x 5,000 mm L x 300 mm H)	(9 sets)		
		. Gas welder	(80 sets)		
		. Gas & oxygen hose	(100 sets)		
		. Gas regulator	(100 sets)		
		(2) Crane & Handling tools	1 set		
		. Shackles (1 - 15 tons)	(3 sets)		
		. Steel wire rope (10ø x 3 m - 18ø x 8 m)	(3 sets)		

Table 3-5 Facility Plan (New Machine Tool) (42/43)

NO.	FACILITY	DESCRIPTION		BASIS OF PLAN	REMARKS
PT-1	Plate working tools	Plate working tools (cont'd)			
		. Hang clamp (0 - 35 mm - 3 tons, 0 - 50 mm - 5 tons)	(3 sets)		
		. Spur geared chain hoist (1/2, 1, 1-1/2, 2, 2-1/2, 5 tons)	(3 sets)		
		(3) Electric welding tools	1 set		
		. Potable type electric dryer (10 kg - 50 - 300°C)	(14 sets)		
		. Holder (300 A, 500 A)	(33 sets)		
		. Gauging torch (600 A)	(9 sets)		
		. Air tools (Pneumatic multiple jet chisel etc.)	(2 x 20 sets)		
		(4) Fitting tools	1 set		
		. Disc sander (Air type)	(52 sets)		
		. Ratchet lever hoist (1.5, 3, 6 tons)	(6 sets)		
		. Air hose (3/4" & 20 M)	(170 sets)		
		. Impact wrench	(3 sets)		
		. Hydraulic jack (15, 25, 50, 100 tons)	(3 sets)		
		. Magnetic drill press. (25ϕ, 32ϕ)	(3 sets)		
		. Spare parts etc.	(1 set)		
		(5) Measuring tools (for plate works)	1 set		
		. Automatic level (x28 - 40ϕ)	(3 sets)		
		. Transit (x30 - 40ϕ)	(3 sets)		
		. Precision square level (300 mm x 0.02 B class)	(3 sets)		
		. Vernier caliper (300 mm x 10 pcs)	(3 sets)		
		. Tempered steel rule (150 mm, 1 m, 2 m) etc.	(56 sets)		
		(6) Maintenance tools	1 set		
		. Insulation resistance tester	(3 sets)		
		. Tester	(3 sets)		
		. Simple thermometer	(3 sets)		

Table 3-5 Facility Plan (New Machine Tool) (43/43)

NO.	FACILITY	DESCRIPTION		BASIS OF PLAN	REMARKS
PT-1	Plate working tools	Plate working tools (cont'd)			
		. Tachometer	(3 sets)		
		. Spanners	(3 sets)		
		. Bench grinder (150ø)	(1 sets)		
		. Bearing puller set	(3 sets)		
		. Tool cabinet (590W x 600H x 540D x 5 stage)	(15 sets)		
		. Tool cabinet (750W x 1,100H x 700D x 9 stage)	(5 sets)		
		. Tool rack (1,200W x 1,800H, 450D, 875W x 1,900H x 450D)	(5 sets)		
		(7) Hydraulic pump (100 kg/cm^2, 10 ℓ/min, 3.7 kW)	1 set		
		(8) Tube expanding tools	1 set		
		. Facing tools (1" - 25")	(3 sets)		
		. Universal joints	(3 sets)		
		. Expanders	(3 sets)		

BOMA-STORK PASURUAN WORK SHOP

Table 3-6 Facility Plan (Handling Equipment) (1/2)

NO.	FACILITY	DESCRIPTION	BASIS OF PLAN	REMARKS
H-01	50/10T O.H.C. (1 set)	*Major Specifications* 1) Lifting capacity Main : 50 TON Aux. : 10 TON 2) Lifting height : 11 M 3) Crane span : 22.6 M 4) Operation method : By directly or radio	*For large workpieces and improving* assembling efficiency	*Location: Bay E-F*
H-02	10T O.H.C. (1 set)	Major specifications 1) Lifting capacity : 10 TON 2) Lifting height : 7 M 3) Crane span : 16 M 4) Operation method : By radio	Improving handling efficiency	Location: Bay A-B
H-03	5T O.H.C. (1 set)	Major specifications 1) Lifting capacity : 5 TON 2) Lifting height : 10 M 3) Crane span : 13 M 4) Operation method : By pendant switch	Improving efficiency of materials handling	Location: Bay L-M

Table 3-6 Facility Plan (Handling Equipment) (2/2)

NO.	FACILITY	DESCRIPTION		BASIS OF PLAN	REMARKS
H-04	1.5T Jib hoist (1 set)	Major specifications 1) Lifting capacity 2) Lifting height 3) Arm length 4) Operation method	 : 1.5 TON : 7 M : 6 M : By pendant switch	Improving efficiency of assembly work	Location: Bay C-29
H-05	2T Forklift (1 set)	Major specifications 1) Rated capacity 2) Type 3) Engine	 : 2 TON : Front-lifting type : Diesel engine	Improving handling efficiency	
H-06	2T Transfer carriage (1 set)	Major specifications 1) Rated capacity 2) Type 3) Engine	 : 2 TON : Low-bed type : Gasoline engine	Improving handling efficiency	

BOMA-STORK PASURUAN WORK SHOP

Table 3-7 Facility Plan (Building & Auxiliary Facilities) (1/2)

NO.	FACILITY	DESCRIPTION	BASIS OF PLAN	REMARKS
BW-01	Rebuilt/ expansion of bay E-F	Major specifications 1) Dimension (Total area; 1328.4 M^2) Width : 24.6 M Length : 54 M Height : 16 M (Eaves height) 2) Structure Column/beam : Steel structure Wall/roof : C.G.I.S. 3) Aux. facilities a. Crane girder/rail for 50/10 T O.H.C. b. Crane girder/rail for 12T O.H.C.	For large equipment assembling	Details are shown on Fig. 3-1
BW-02	Rebuilt/ expansion of bay L-M	Major specifications 1) Dimension (Total 210 M^2) Width : 14.7 M Length : 14.3 M Height : 6 M 2) Structure Column/beam : Steel structure Wall/roof : C.G.I.S. 3) Aux. facilities a. Crane girder/rail for 5T O.H.C.	Utilization as materials storage yard for improving production flow	

Table 3-7 Facility Plan (Building & Auxiliary Facilities) (2/2)

NO.	FACILITY	DESCRIPTION	BASIS OF PLAN	REMARKS
BW-03	Partition work for tool shop	Major specifications 1) Dimension (Total 240 M^2) Width : 15 M Length : 16 M	Relocation as a result of reconstruction of Bay E-F	Location: Bay: C-D Column: 22-24
BW-04	Substation building	Major specifications 1) Total area : Approx. 100 M^2 2) Structure : Steel structure and C.G.I.S. wall/roof	For new substation system	Location: Beside power house
BW-05	Reinforcement of columns for Jib hoist	Major specifications 1) Location : C-29 2) Capacity of Jib hoist : 1.5 TON		

Table 3-8 Facility Plan (Infra-structure/Electrical/Utility Facilities) (1/3)

NO.	FACILITY	DESCRIPTION	BASIS OF PLAN	REMARKS
UW-01	Connection fee to PLN	Payment to P.L.N for proposed 22 kv transmission line		
UW-02	Substation system	Major specifications 1) Type : Indoor load-center type a) Switchgear : Metal enclosed, self standing b) Transformer : Oil immersed, self cooled type 2) Voltage a) Primary : 22 kV, 3 phase, 50 Hz b) Secondary : 380/220 V, 3 Phase, 4 wires 3) Capacity : 1,000 kVA 4) Aux. equipment/materials/work a) Change-over switchboard between PLN power and emergency generator sets b) Foundation work for substation equipment c) Installation work including testing d) Spare parts and maintenance tools	Required to meet to the power demand increaing due to installation of new facilities.	Details are shown on Fig. 3-2

Table 3-8 Facility Plan (Infra-structure/Electrical/Utility Facilities) (2/3)

NO.	FACILITY	DESCRIPTION	BASIS OF PLAN	REMARKS
UW-03	L.V. power supply system	Major specifications 1) Scope : Wiring work from substation to electrical equipment/facilities 2) Wiring method : Overhead conduit type 3) Materials a. Power cable : 600V PVC insulated b. Panelboard : Metal enclosed, wall hanging type		Details are shown on Fig. 3-3
UW-04	Lighting system	Major specifications 1) Lighting fixtures : Mercury vapor lamp (40 sets) 2) Wiring method : Overhead conduit type 3) Panelboards : Metal enclosed, wall hanging type		
UW-05	LNG Gas generator	Major specifications 1) Capacity : 5 M^3 2) Piping method : 200 mm dia. overhead piping	For SR Furnace	

Table 3-8 Facility Plan (Infra-structure/Electrical/Utility Facilities) (3/3)

NO.	FACILITY	DESCRIPTION		BASIS OF PLAN	REMARKS
UW-05	Drainage system	Major specifications		Increased drainage capacity	
		1) Capacity			
		Drainage pit	: 40 TON		
		Drainage Pump	: 18.5 kW - 1 set New		
			: 18.5 kW - 1 set Relocation		
		2) Aux. facilities			
		Drainage piping			
		Drainage ditch			

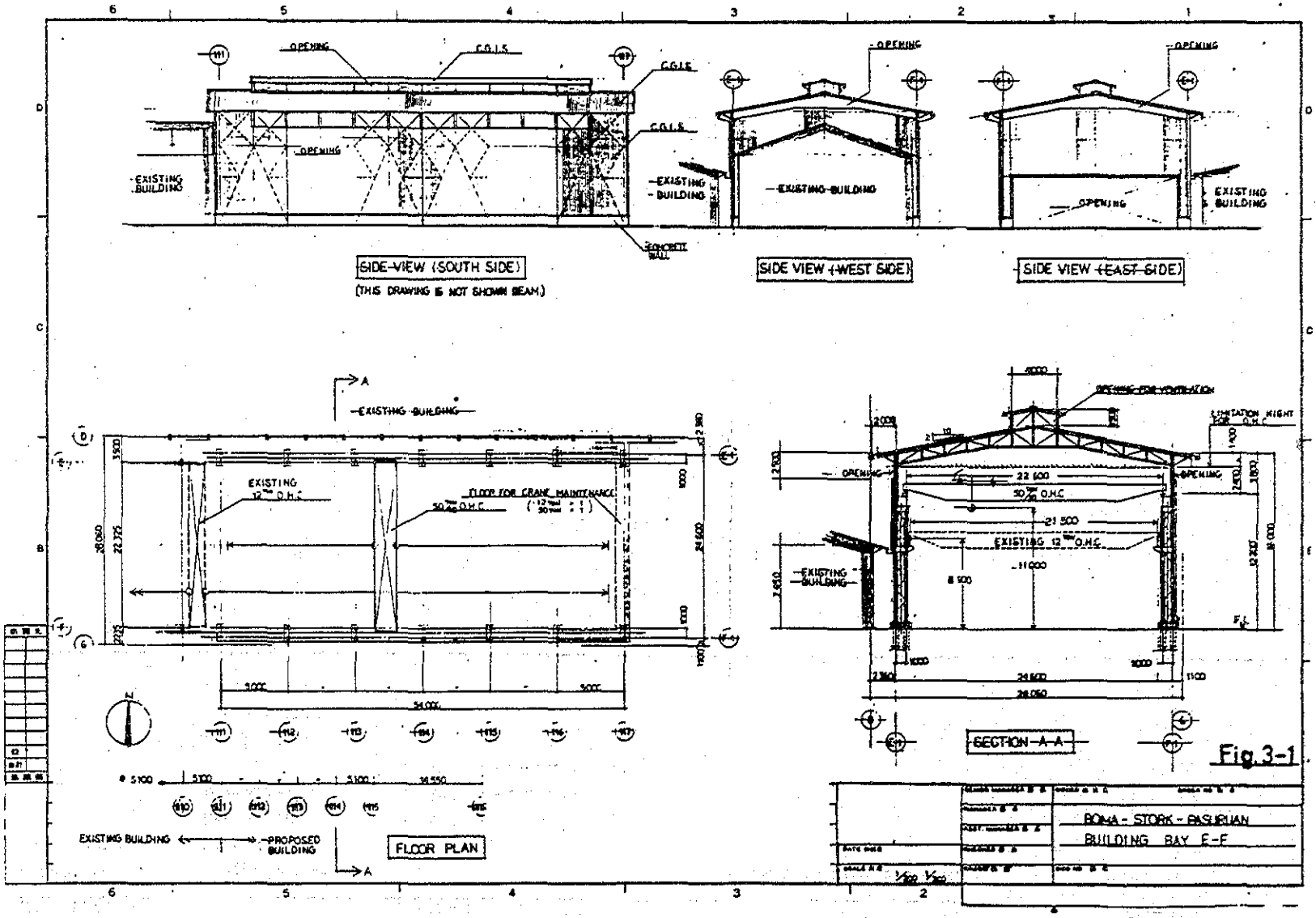

SIDE-VIEW (SOUTH SIDE)
(THIS DRAWING IS NOT SHOWN BEAM.)
SIDE VIEW (-WEST SIDE)
SIDE VIEW (-EAST SIDE)
OPENING
EXISTING BUILDING
CONCRETE WALL
FLOOR PLAN
EXISTING BUILDING ←→ PROPOSED BUILDING
SECTION-A-A
OPENING FOR VENTILATION
EXISTING 12 m O.H.C
50 m O.H.C
FLOOR FOR CRANE MAINTENANCE
BOMA - STORK - PASUNUAN
BUILDING BAY E-F

Fig.3-1

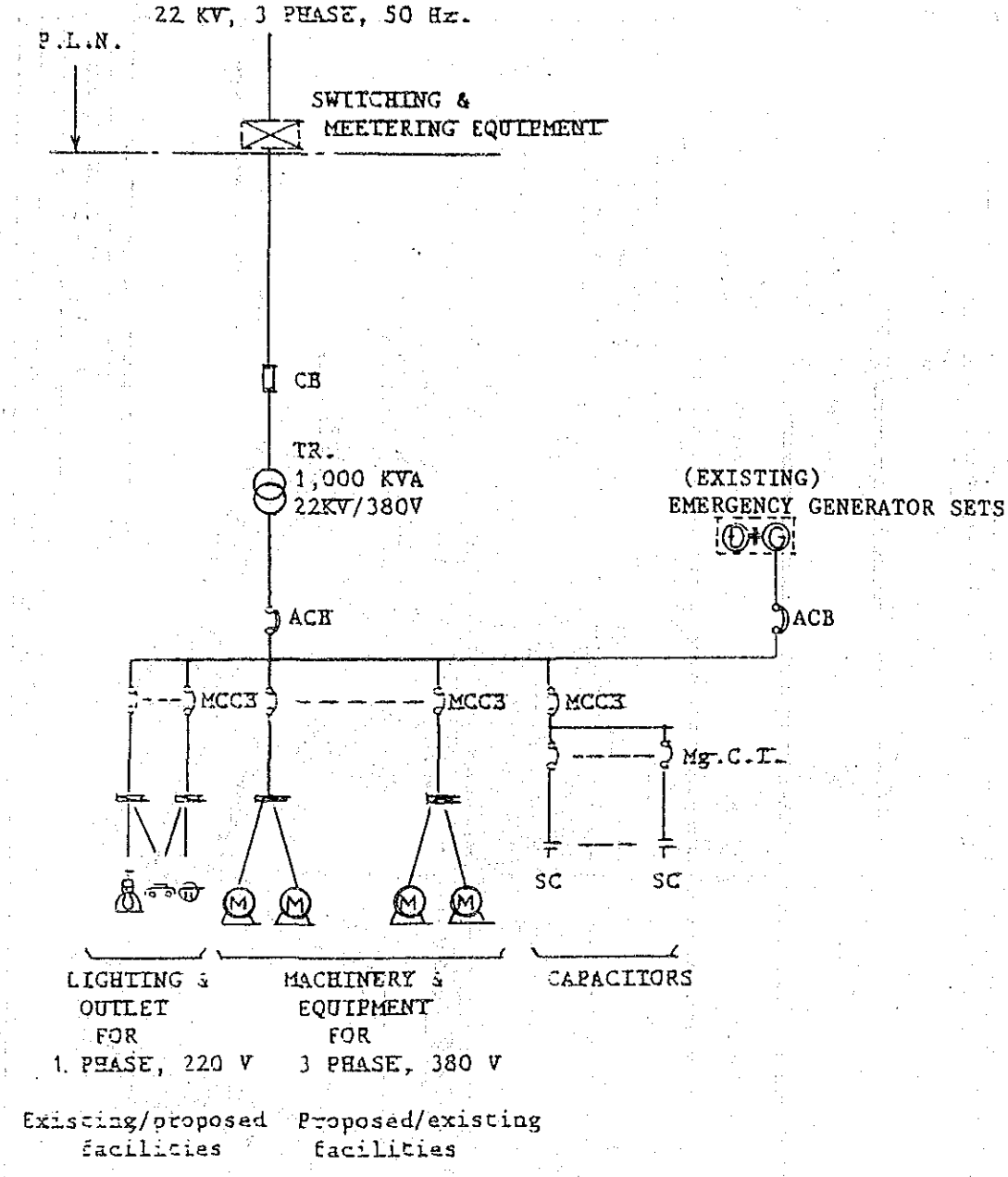


Fig. 3-2

BOMA-STORK PASURUAN WORK SHOP

PROPOSED SUBSTATION SYSTEM

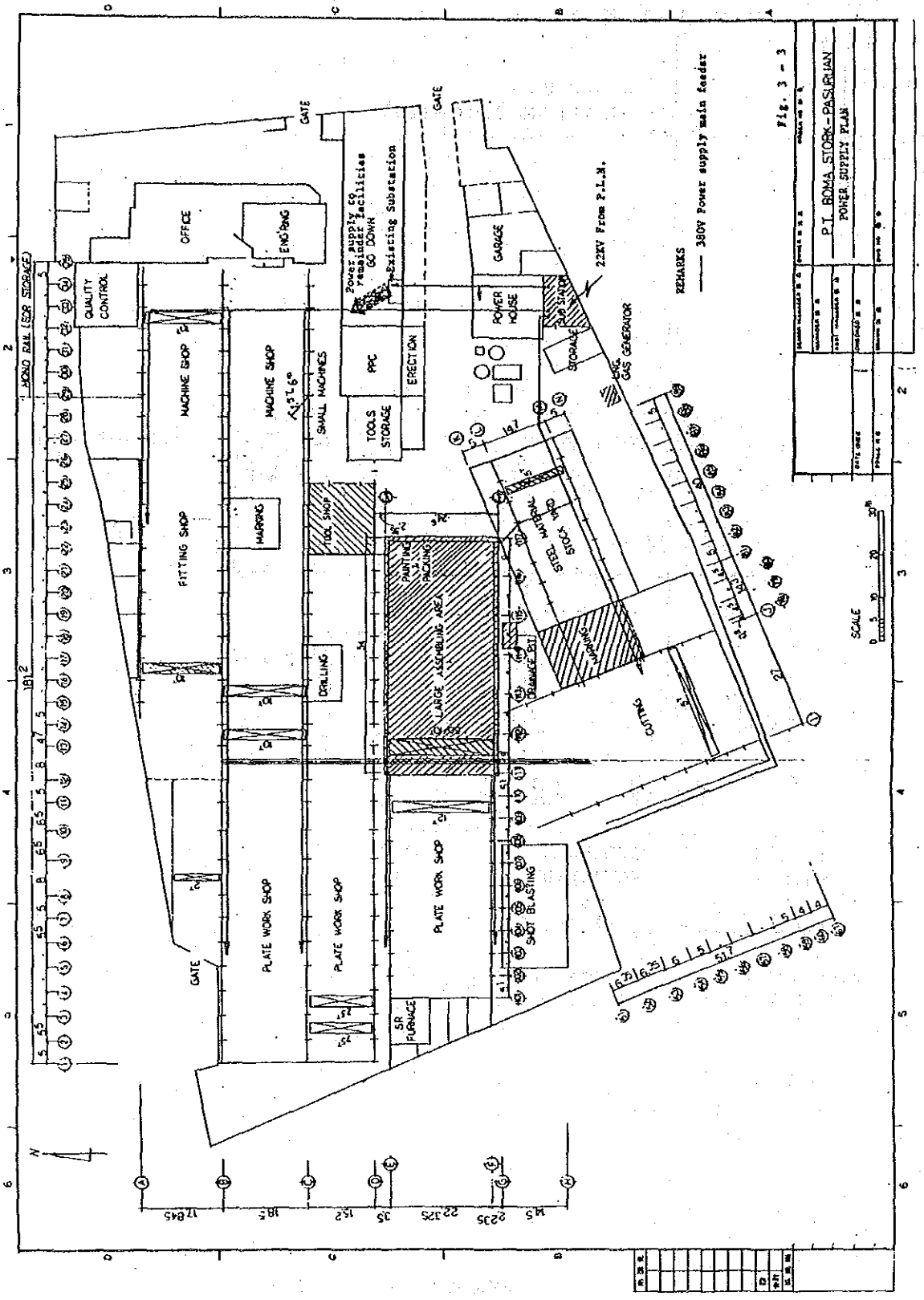


Fig. 3 - 3
P.T. ROMA STORK - PASURUAN
POWER SUPPLY PLAN
REMARKS
—— 380V Power supply main feeder
22KV From P.L.N.
Power supply to remainder facilities GO DOWN
Existing Substation
GATE
OFFICE
ENGRNG
QUALITY CONTROL
MONO RAIL (SCR STORAGE)
MACHINE SHOP
FITTING SHOP
MARKING
TOOL SHOP
DRILLING
SMALL MACHINES
PPC
TOOLS STORAGE
ERECTION
GARAGE
POWER HOUSE
SUB STATION
STORAGE
GAS GENERATOR
PAINTING
PACKING
LARGE ASSEMBLING AREA
STEEL MATERIAL STOCK YARD
DRAINAGE DITCH
CUTTING
PLATE WORK SHOP
SHOT BLASTING
SR FURNACE
SCALE
N

4.7.4 The Renovation Promotion Program

(1) The outline of the renovation and conditions for design

1) The basic layout program

Considering the survey results of the existing layout and products structure and production in the future, the main points of the new layout program is as follows.

① Improvement of the flow of products and materials

The layout of the facilities should be made to shorten and simplify the flow of the production process.

② Setting up the storage space for materials

The appropriate storage space for materials corresponding to the production should be maintained and clarified as the starting point of the production process.

Also, the amount of the incomplete products should be reduced by supplying materials at the right time.

③ Adding handling facilities

The flexible handling system should be maintained by adding forklifts and transfer carriages to the overhead cranes and carriages on the rail for handling materials in and between the bay.

2) The detailed layout of the buildings and machines

The layout of the buildings including utility facilities and auxiliary facilities made based on the basic layout program is shown in Fig. 4-1 Proposed Layout.

The detailed layout of machines in each building is shown in Fig. 4-2 Detailed Layout.

The main points of the layout:

① About 54 m of the east side of E-F bay will be reconstructed and reinforced.

On this part, one 50/10 ton overhead travelling crane will be installed for plate work and assembly of the large boilers.

On the west side of the main building, large press, bending roll and annealing furnace will be installed.

② The L-M bay will be extended about 14 m to the west and 5 ton overhead travelling crane will be newly provided in the building.

③ The existing tool shop will be removed and relocated.

This is done to maintain the path for machined products after reconstruction of the E-F bay.

④ Other buildings will be reused as they are with overhead travelling cranes but 10 ton overhead travelling crane will be added to A-B bay.

⑤ The transfer carriage will be provided for transferring materials from L-M bay to I-J bay.

⑥ The point of the new layout of the machine shop area is that the flow of materials is improved by constructing the path for transferring the products between A-B bay and B-C bay and that the temporary storage area for materials and marking plate to be maintained in B-C bay.

The layout of other machines is not changed and only obsolete machines are renewed.

⑦ The layout of the utility facilities is as follows.

i) Renewal and relocation of the substation system.

ii) Installation of the new LNG gas generator.

This will be installed for the stress relieving furnace to be installed in the E-F bay.

iii) Installation of one new air compressor.

This will be connected to the air pipings in the existing building.

⑧ The existing sandblasting room will be reused to prevent the dust from entering various rooms from the production area by repairing the partition between rooms.

3) Comparison between before and after the renovation

With reference to the boilers that are main products of Pasuruan Work Shop, the main points of the improvement on the manufacturing of the boilers after the renovation are shown below.

① The flow of production is shortened and simplified.

The production flow of boilers before the renovation is shown in Fig. 4-3 Existing Production Flow and that after the renovation is shown in Fig. 4-4 Proposed Production Flow.

The main improved points when compared are as follows.

i) The path for transferring steel materials is shortened and improved.

Transferring the steel materials from the L-M bay makes it possible to locate steel materials storage, marking, cutting, and preparation area on one line in this order. As a result, efficiency of the production will be improved.

Also, it is possible to maintain enough space for the materials storage by using L-M bay and give enough space to the work area to I-J bay.

The newly provided railless transfer carriage helps transferring the materials from L-M bay to I-J bay.

ii) The reasonable flow of production can be attained by using the different building depending upon the size (dimension and weight) of the product.

Production of large boiler in the E-F bay and medium and small sized boilers in the B-C and C-D bays will simplify the product flow and makes possible effective mass production.

Bending of the medium and small boiler drums will be conducted in the I-J bay and they will be supplied to the B-C bay or the C-D bay.

This will enable utilization of enough space for welding and assembly in the two buildings above.

(2) Improvement of productivity and quality

i) Reconstruction and reinforcement of E-F bay makes possible effective production of large boilers.

The lack of capacity of crane, press and bending roll, and also the absence of non-destructive inspection equipment and annealing furnace in this existing plant cause the inefficiency in production system.

The renovation will improve quality and productivity through the newly installed equipment.

ii) Installation of the table for cutting and automatic flame cutting machine will bring about efficiency and good quality in cutting and beveling.

Since assurance and quality in cutting and beveling will affect weld quality greatly, the above measure will decrease the trouble on the weld quality in the next process.

iii) Introduction of the automatic welding machine improves the weld quality and efficiency in the welding.

The submerged arc welding machine will be introduced for the outside circumference and longitudinal welding of the boiler drum.

iv) To eliminate the bottle neck of the existing process, the radial drilling machine for drilling the tube plate will be installed.

(2) Renovation cost

The details of the investment required for the renovation is shown in Table 4-1 Summary of Investment Cost.

But note the expense for using the existing organization in the factory and labor charge of trainees during the training period are not considered in investment.

(3) Renovation project promotion program

1) The body to conduct the project

① Promotion body

② D/D consultant

③ Facilities suppliers

Suppliers of machine tools, plate work facilities, tools, cranes, steel frame materials, electrical facilities, machine parts for modification.

④ Local construction companies

Foundation, steel frame machining, building construction, installation work of electrical and utility facilities, cranes and machines.

⑤ Training instructor

2) Promotion body

In order to advance the renovation project smoothly, P.T. Boma Stork should set up the promotion body that can function effectively when selecting the consultant that is in charge of D/D.

It is desirable that the body has two full time officials who are qualified for the following work.

① Various duty for selecting D/D consultant.

② Instruction to and coordination with the D/D consultant.

③ Approval of the renovation implementation plan.

④ Various duty for selecting suppliers of equipment and facilities.

⑤ Various duty for selecting local construction companies.

⑥ Supervision of suppliers and construction companies (excluding technical supervision).

⑦ Coordination among suppliers and construction companies.

⑧ Various duty for selecting training instructor.

⑨ Instruction to and coordination with training instructor.

The promotion body can not do everything and placing orders, making contracts, payment and inspection of the purchased goods should be conducted under the cooperation of the people who are in charge of routine works in the plant.

(4) Control of the renovation work

The supervision of the suppliers and construction companies will be made basically by the promotion body under the coordination of the existing organization as mentioned in (3). But it is desirable to entrust the following to the D/D consultant.

A. To suppliers of facilities and machines.

a. Inspection of the main machines at the supplier's plant.

b. Approval of the maker specifications and drawing on the main machines.

B. To construction companies

a. Schedule control

b. Quality inspection of the main constructions

c. Guidance on the fabrication of steel frame

(5) Implementation schedule of renovation

The renovation implementation schedule that is a prerequisite of the feasibility study is shown in Fig. 4-5 Implementation Schedule. This is made on condition

that the selection of the D/D consultant will start early May in 1985 and the contract with the suppliers will be effective at the end of June in 1986.

Table 4-1 Summary of Investment Cost

BOMA-STORK PASURUAN WORK SHOP

ITEM	FOREIGN PORTION (MIL.YEN)	DOMESTIC PORTION (MIL. YEN)	TOTAL (MIL. YEN)	Details are Specified in
1. Machine tool	839.6	91.0	930.6	Table 4-2
2. Steel fabrication equipment	345.8	30.6	376.4	Table 4-2
3. Miscellaneous equipment, tool etc.	315.7	3.0	318.7	Table 4-2
4. Handling equipment	89.7	5.3	95.0	Table 4-2
5. Machinery reforming	70.5	37.1	107.6	Table 4-3
6. Building & miscellaneous facilities	28.9	179.5	208.4	Table 4-4
7. Electrical & utility facilities	46.9	50.5	97.4	Table 4-4
(Subtotal-1)	(1,737.1)	(397.0)	(2,134.1)	
8. Detailed designing	61.3	28.2	89.5	Table 4-5
9. Implementing body	-	22.7	22.7	
10. Training	96.4	37.4	133.8	
(Subtotal-2)	(157.7)	(88.3)	(246.0)	
11. Contract tax	-	279.5	279.5	
12. Contingency				
12-1 Physical	56.8	34.0	90.8	
12-2 Escalation	118.7	205.3	324.0	
(Subtotal-3)	(175.5)	(518.8)	(694.3)	
TOTAL	2,070.3	1,004.1	3,074.4	

BOMA-STORK PASURUAN WORK SHOP

Table 4-2 Investment Cost Estimation (New Machine & Handling Equipment)

FACILITY		Q'TY	FOREIGN PORTION (MIL. YEN) FOB	OCEAN FREIGHT	INSURANCE	SUPERVISION	SUB TOTAL	DOMESTIC PORTION (MIL. YEN) CUSTOM TRANSPORTS	FOUNDATION	INSTALLATION	LOCAL EXPENSE	SUB TOTAL	TOTAL (MIL. YEN)
Machine tool	Lathe	6	191.7	7.2	1.1	7.0	207.0	2.6	9.1	10.1	0.4	22.2	229.2
	Vartical lathe	1	86.1	1.1	0.3	0.6	88.1	0.4	14.4	5.1	-	19.9	108.0
	Boring machine	2	173.6	1.7	0.5	2.8	178.6	0.7	17.1	7.5	0.1	25.4	204.0
	Planer/planomiller	3	39.0	0.7	0.1	4.2	44.0	0.3	3.8	3.4	0.2	7.7	51.7
	Drilling machine	3	39.6	0.6	0.1	3.4	43.7	0.3	0.1	0.1	0.1	0.6	44.3
	Gear cutting machine	2	174.2	1.7	0.6	2.8	179.3	0.6	6.1	2.9	0.1	9.7	189.0
	Others	4	94.7	0.4	0.2	3.6	98.9	0.2	4.0	1.2	0.1	5.5	104.4
	(Subtotal)	(21)	(798.9)	(13.4)	(2.9)	(24.4)	(839.6)	(5.1)	(55.6)	(29.3)	(1.0)	(91.0)	(930.6)
Steel fabrication equipment	Cutting equipment	19	13.0	1.4	-	2.1	16.5	0.6	1.2	1.2	0.1	3.1	19.6
	Bending equipment	4	144.7	5.9	0.5	13.6	164.7	2.4	15.5	4.9	0.6	23.4	188.1
	Welding equipment	49	81.8	2.9	0.2	-	84.2	1.1	-	-	-	1.1	85.3
	Others	8	75.7	2.4	0.2	2.1	80.4	0.9	1.0	1.0	0.1	3.0	83.4
	(Subtotal)	(80)	(314.5)	(12.6)	(0.9)	(17.8)	(345.8)	(5.0)	(17.7)	(7.1)	(0.8)	(30.6)	(376.4)
Miscelleneous equipment, tools	Heat treatment facility	2	166.0	0.1	-	1.9	168.0	0.1	0.3	0.5	0	0.9	168.9
	Marking/inspection plate												
	Inspection equipment/tools												
	Tools	4	146.1	0.5	0.5	0.6	147.7	0.3	-	1.8	-	2.1	149.8
	(Subtotal)	(6)	(312.1)	(0.6)	(0.5)	(2.5)	(315.7)	(0.4)	(0.3)	(2.3)	(-)	(3.0)	(318.7)
Handling equipment	Overhead travelling crane	3	73.2	8.5	0.3	1.7	83.7	2.8	-	2.1	0.1	5.0	88.7
	Wall crane												
	Jib hoist	1	1.7	0.1	-	-	1.8	0.1	-	0.1	-	0.2	2.0
	Forklift/transfer carriage	2	4.0	0.2	-	-	4.2	0.1	-	-	-	0.1	4.3
	(Subtotal)	(6)	(78.9)	(8.8)	(0.3)	(1.7)	(89.7)	(3.0)	(-)	(2.2)	(0.1)	(5.3)	(95.0)
	TOTAL	113	1,504.4	35.4	4.6	46.4	1,590.8	13.5	73.6	40.9	1.9	129.9	1,720.7

Table 4-3 Investment Cost Estimation (Machinery Reforming)

REHABILITATION & RELOCATION		Q'TY	FOREIGN PORTION (MIL. YEN) FOB	OCEAN FREIGHT	INSURANCE	SUPERVISION	SUB TOTAL	DOMESTIC PORTION (MIL. YEN) CUSTOM TRANSPORTS	HANDLING	IMPROVEMENT	FOUNDATION	ERECTION	LOCAL EXPENSE	SUB TOTAL	TOTAL (MIL. YEN)
MACHINE TOOL	IMPROVEMENT OVERHAUL	19	58.6	0.2	0.1	5.2	64.1	0.2		16.6			0.2	17.0	81.1
"	RELOCATION	14	3	0.1		1.5	4.6	0.1	0	1.8	0.8	2.1	0.1	4.9	9.5
"	REMOVAL	14							12.6					12.6	12.6
STEEL FABRICATION EQUIPMENT	RELOCATION	2	0.8			1.0	1.8			0.7			0.1	0.8	2.6
"	REMOVAL	3							1.8					1.8	1.8
	TOTAL	52	62.4	0.3	0.1	7.7	70.5	0.3	14.4	19.1	0.8	2.1	0.4	37.1	107.6

BOMA-STORK PASURUAN WORK SHOP

Table 4-4 Investment Cost Estimation (Building/Electrical/Utility Facilities)

CONSTRUCTION WORK		Q'TY	FOREIGN PORTION (MIL. YEN) FOB	OCEAN FREIGHT	INSURANCE	SUPERVISION	SUB TOTAL	DOMESTIC PORTION (MIL. YEN) CUSTOM TRANSPORTS	FABRICATION	FOUNDATION	ERECTION	LOCAL EXPENSE	SUB TOTAL	TOTAL (MIL. YEN)
Building & miscelleneous facilities	Expansion/rebuilt of Bay E-F		23.2	2.5	0.1		25.8	2.0	20.0	16.0	70.0		108.0	133.8
	Expansion/rebuilt of Bay L-M		2.8	0.3			3.1	0.2	2.4	4.8	25.2		32.6	35.7
	Substation system						-			1.2	6.8		8.0	8.0
	Partition work for tool shop						-				30.0		30.0	30.0
	Reinforcement of columns for jib hoist						-			0.2	0.7		0.9	0.9
	(Subtotal)		(26.0)	(2.8)	(0.1)	(-)	(28.9)	(2.2)	(22.4)	(22.2)	(132.7)	(-)	(179.5)	(208.4)
Electrical & utility facilities	Connection fee to P.L.N.						-					11.0	11.0	11.0
	Substation system		18.9	1.4	0.1	2.0	22.4	0.5			5.0	0.1	5.6	28.0
	L.V. Power supply system		10.0	1.0			11.0	0.3			19.8		20.1	31.1
	Lighting system		2.4	0.6			3.0	0.2			3.1		3.3	6.3
	L.N.G. Gas generater		8.3	0.7			9.0	0.3			3.7		4.0	13.0
	Drainage system		1.3	0.2			1.5	0.1			6.4		6.5	8.0
	(Subtotal)		(40.9)	(3.9)	(0.1)	(2.0)	(46.9)	(1.4)	(-)	(-)	(38.0)	(11.1)	(50.5)	(97.4)
	TOTAL		66.9	6.7	0.2	2.0	75.8	3.6	22.4	22.2	170.7	11.1	230.0	305.8

BOMA-STORK PASURUAN WORK SHOP

Table 4-5 Investment Cost Estimation
(Detailed Design Work)

A ——— ENGINEERING WORK & SUPERVISION IN INDONESIA
B [——] ENGINEERING & DESIGN IN CONSULTANT'S HOME WORK
C - - - - LOCAL EXPENSES

DESCRIPTION		COST ESTIMATION (MIL. YEN)				SCHEDULE
		A	B	C	TOTAL	1985 1986 1987 1988 1989 1990
Expansion/reconstruction of buildings	Investigation of existing situation, designing, preparation of specifications both for construction works and procurement of steel materials, and supervision of construction works.	9.4		3.6	13.0	4 ———
			3.6		3.6	800 H 2
				3.4	3.4	400 H 16 M
Electrical and utility facilities	Investigation of existing situations, planning of infra-structure, designing, preparation of specifications both for construction works and procurement of materials and equipment, and supervision.	7.1		2.4	9.5	1 2 1
			3.0		3.0	500 H
				0.3	0.3	100 H
Machinery equipment	Investigation of existing situations, preparation of specifications both for procurement of machinery, equipment, parts and tools, and machinery reforming work and supervision.	1.9		0.6	2.5	1
			6.0		6.0	1000 H
Machinery foundation	Designing, preparation of specifications for foundation work, and supervision.	4.7		1.8	6.5	3
				2.0	2.0	800H
Handling facilities	Preparation of specifications for procurement.		0.6		0.6	100 H
Site fabrication	Preparation of specifications and supervision for site fabrication of steel materials for buildings.	3.3		1.2	4.5	2
			0.6		0.6	100 H
General	Review of F/S, preparation of implementation program, supervision of implementation time schedule and general consultation to the implementation of the project.	21.1		8.4	29.5	2 7 5
				4.5	4.5	31 M
TOTAL		47.5	13.8	28.2	89.5	

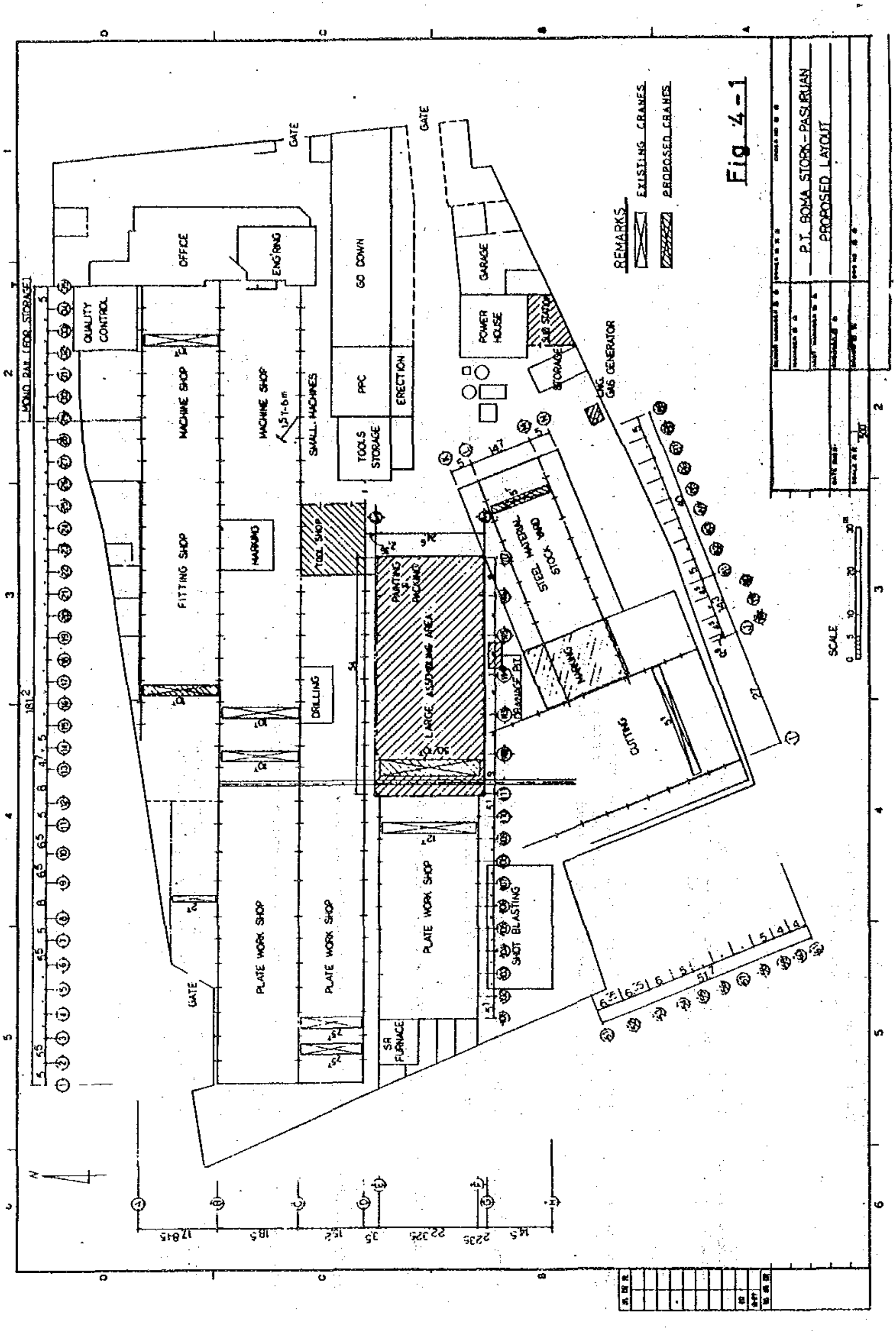


Fig 4-1
P.T. BOMA STORK-PASURUAN
PROPOSED LAYOUT
REMARKS
EXISTING CRANES
PROPOSED CRANES
SCALE
MONO RAIL (FOR STORAGE)
QUALITY CONTROL
OFFICE
ENG'RING
GO DOWN
GARAGE
POWER HOUSE
SUB STATION
STORAGE
GAS GENERATOR
PPC
ERECTION
TOOLS STORAGE
MACHINE SHOP
SMALL MACHINES
FITTING SHOP
MARKING
TOOL SHOP
DRILLING
PAINTING & PACKING
LARGE ASSEMBLING AREA
STEEL MATERIAL STOCK YARD
CUTTING
PLATE WORK SHOP
SHOT BLASTING
SR FURNACE
GATE

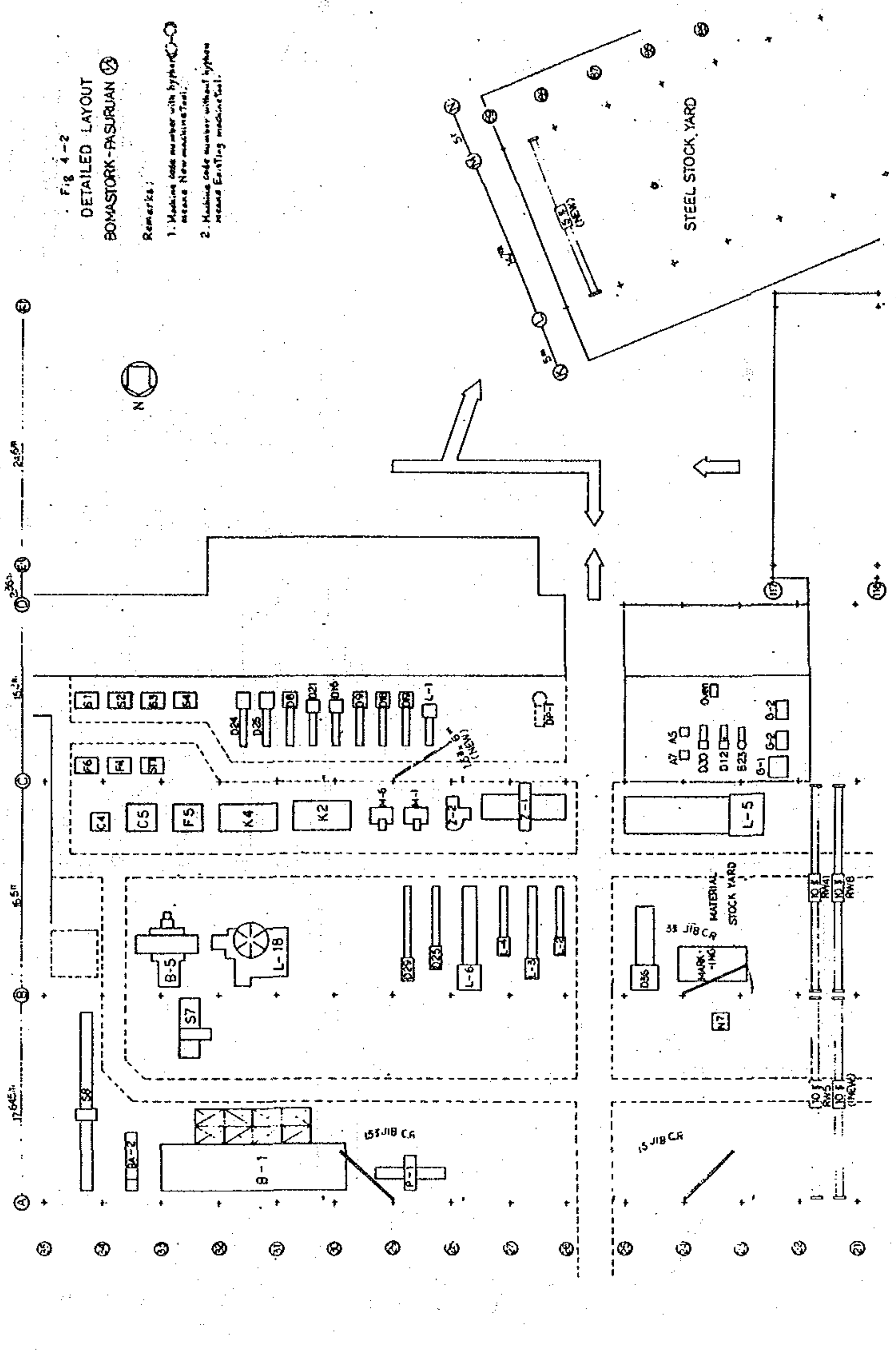


Fig 4-2
DETAILED LAYOUT
BOMASTORK-PASURUAN
Remarks:
1. Machine code number with hyphen means New machine Tool.
2. Machine code number without hyphen means Existing machine Tool.
STEEL STOCK YARD
MATERIAL STOCK YARD
3t JIB CR
15t JIB CR
15t JIB CR
B-1
B-5
L-18
S7
S8
L-6
L-3
C4
C5
F5
K4
K2
L-1
L-5
N7
D36

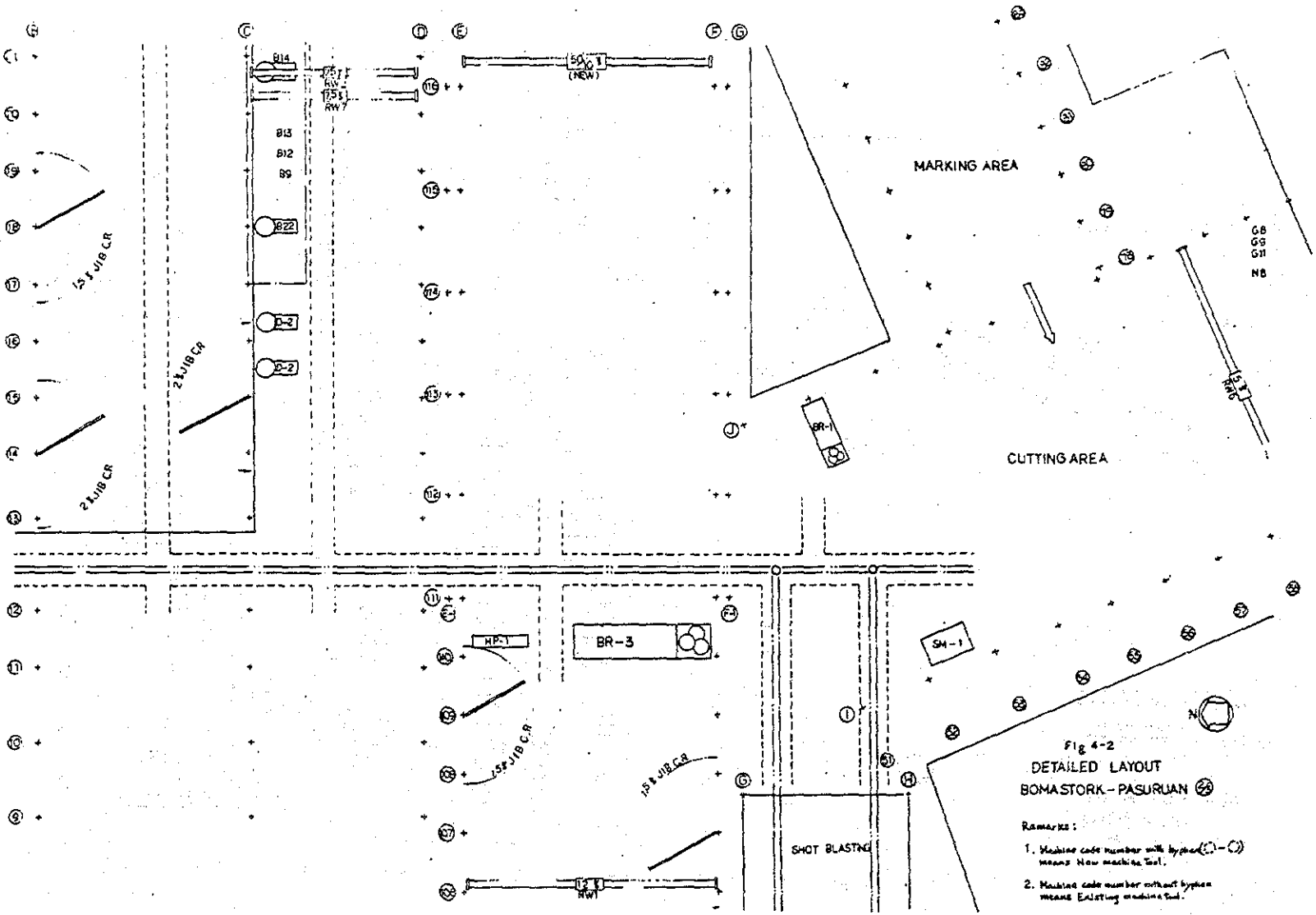


Fig 4-2
DETAILED LAYOUT
BOMA STORK - PASURUAN

Remarks :

1. Machine code number with hyphen (C1 - C) means New machine Tool.
2. Machine code number without hyphen means Existing machine Tool.

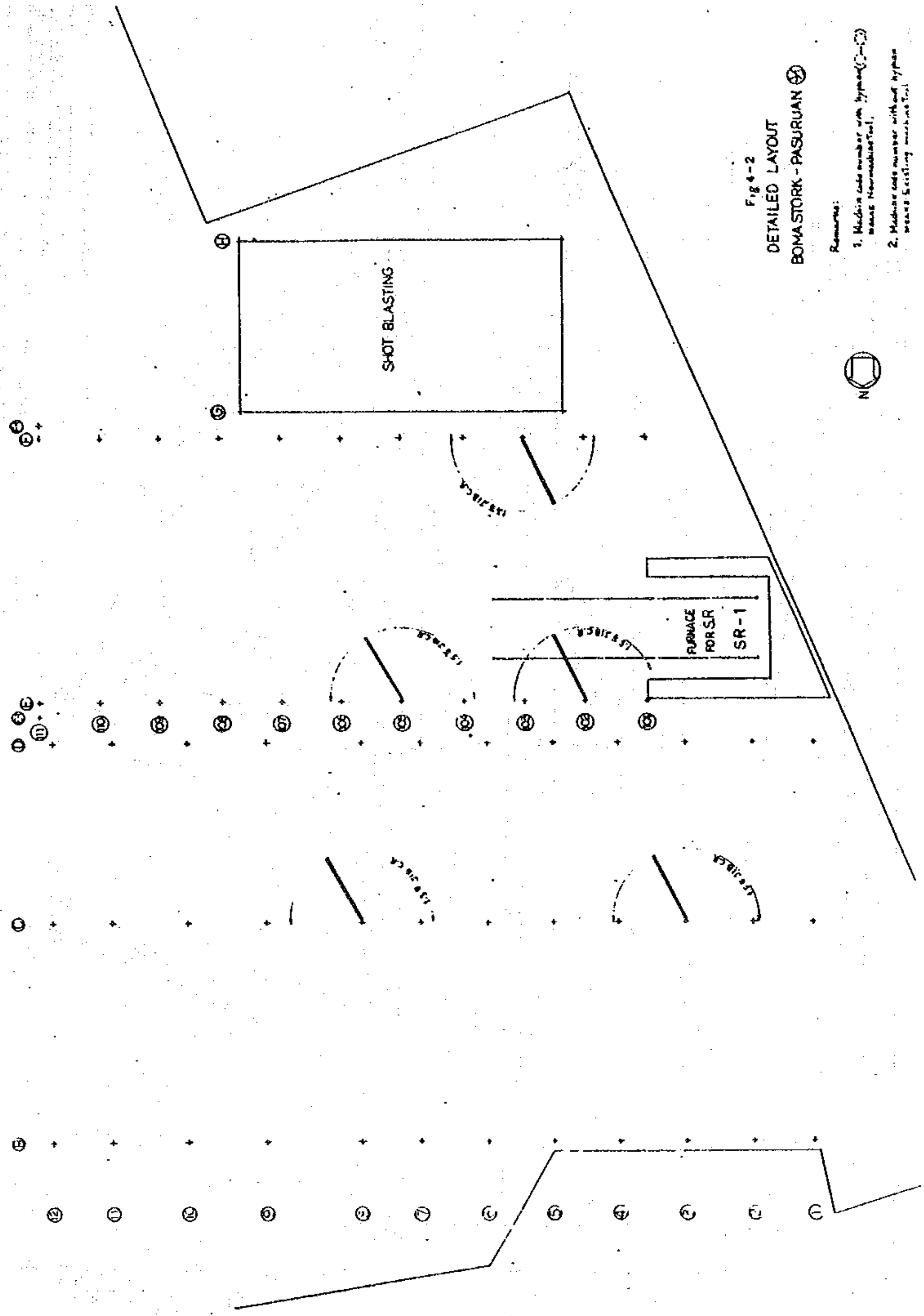
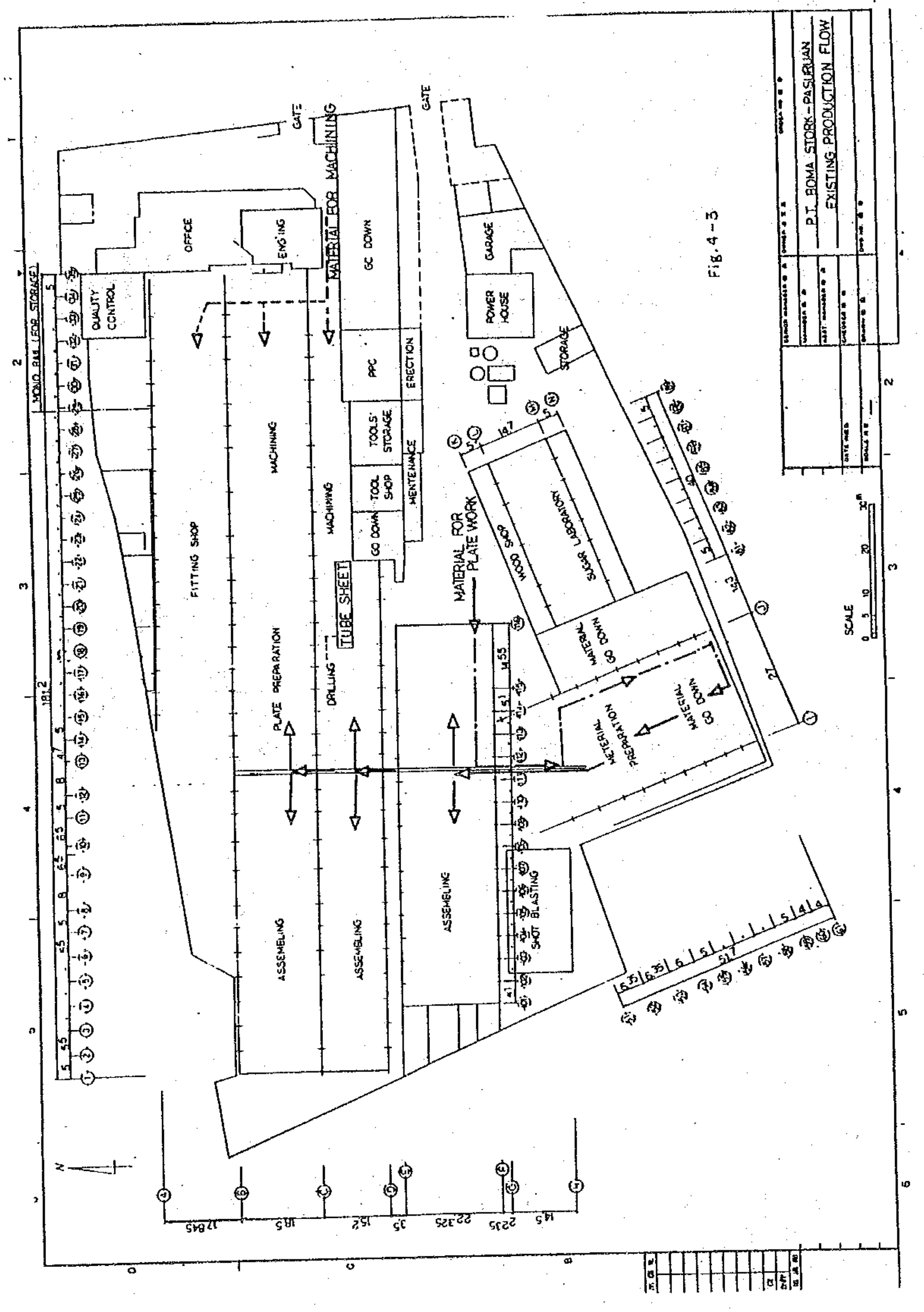


Fig 4-2
DETAILED LAYOUT
BOMA STORK - PASURUAN
SHOT BLASTING
FURNACE FOR S.R
SR-1



P.T. BOMA STORK-PASURUAN
EXISTING PRODUCTION FLOW
MONO RAIL (FOR STORAGE)
GATE
GATE
QUALITY CONTROL
OFFICE
ENGING
MATERIAL FOR MACHINING
GC DOWN
GARAGE
POWER HOUSE
STORAGE
PPC
ERECTION
TOOLS' STORAGE
TOOL SHOP
MENTENANCE
GO DOWN
MACHINING
MACHINING
FITTING SHOP
PLATE PREPARATION
DRILLING
TUBE SHEET
MATERIAL FOR PLATE WORK
WOOD SHOP
SUGAR LABORATORY
MATERIAL GO DOWN
MATERIAL GO DOWN
METERIAL PREPARATION
ASSEMBLING
ASSEMBLING
ASSEMBLING
SHOT BLASTING
SCALE

Fig. 4-3

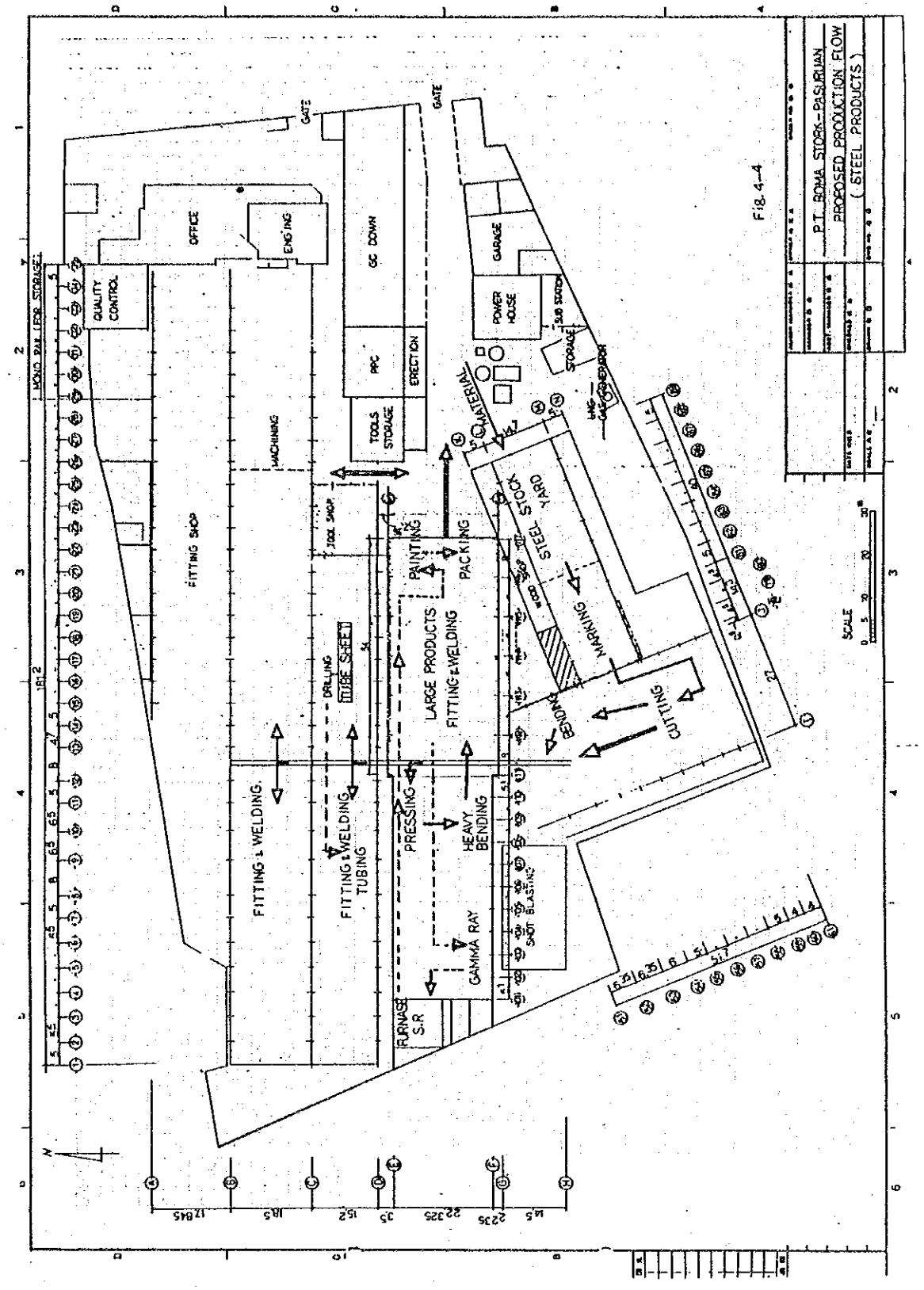
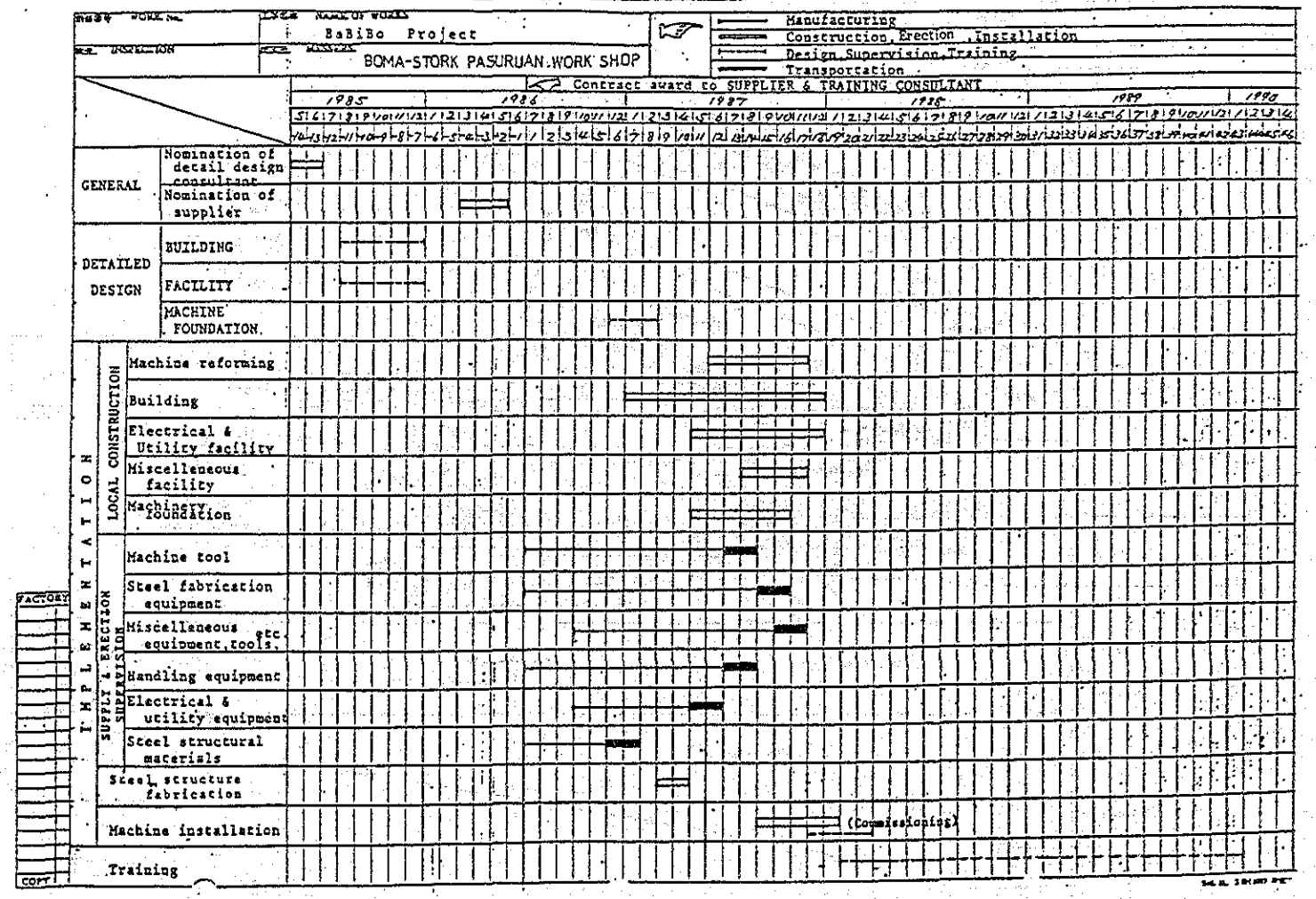

P.T. BOMA STORK - PASURUAN
PROPOSED PRODUCTION FLOW
(STEEL PRODUCTS)
Fig. 4-4
OFFICE
ENGING
GC DOWN
GARAGE
POWER HOUSE
SUB STATION
STORAGE
GATE
QUALITY CONTROL
MACHINING
PPC
ERECTION
TOOLS STORAGE
RAW MATERIAL
STOCK YARD
FITTING SHOP
TOOL SHOP
PAINTING
PACKING
MARKING
BENDING
CUTTING
DRILLING
TUBE SHEET
LARGE PRODUCTS FITTING & WELDING
FITTING & WELDING
FITTING & WELDING TUBING
PRESSING
HEAVY BENDING
GAMMA RAY
SHOT BLASTING
FURNACE S.R
SCALE

Fig. 4-5 IMPLEMENTATION SCHEDULE



4.7.5 Production Management and Training of Workers

(1) Production management system

The production management system is well organized in respect of organization and system structure and is functioning well.

The organization and management that should be improved along with the production program and modernization of the facilities mentioned in 4.7.3 are explained below.

1) The demand on the market in the future will require, for example, a part of the plant or the products including erection work, so the function of production control should be enhanced and the total control and coordination capability should be stabilized.

2) Also not only ordinary boilers but also high quality boilers should be produced in the future. Considering the production and sale of pressure vessels and heat exchangers in the future, the quality control function including non-destructive inspection should be enhanced.

3) In order to improve productivity by using high performance facilities such as full automatic welding machines to be installed newly, the engineer in each production section should make efforts for the purpose. Particularly, the welding section and preparation section should be stabilized.

Considering these points along with the load plan mentioned section 4.7.3. (2), the personnel program is shown in Table 5-1 Personnel Program.

It is recommendable that the following points should be checked and improved with reference to each control system that is used actually at present at P.T. Boma Stork.

① The periodical maintenance and checking of the machines and facilities have been conducted and the results are recorded carefully but the record should be fed back and utilized more positively.

For example, when strength and life of the sling wire is checked it will be necessary to show this on the wire in color paint to draw attention of the users and make maintenance easy.

② The results of checking and follow-up of the production control and quality control should be used for making criteria for work or judgement reference by clarification and standardization of the work.

It will be necessary to make it duty to feed back when any irregularity occurred in this manual.

(2) Training

It may be difficult to make the program including everything because the training and technique which P.T. Boma Stork requires to introduce are extremely wide. The training will include the work to open the offices to talent and train them by the top management of P.T. Boma Stork and sales strategy training that should be conducted in accordance with the top policy and technical training that should be a part of technical agreement. Therefore, the training that can be handled in the feasibility study is limited naturally.

Therefore, the training program will be set up by limiting the training to the production engineering and skill training here in this chapter.

1) Contents and method of production technique training

It may be best to limit the production technique training to the quality control in case of P.T. Boma Stork. As mentioned above, P.T. Boma Stork has ASME and ABI certificates, so the base for quality assurance is stabilized and the point in the future will be how to systemize and drive home the quality control.

As for the method of training, quality assurance specialist should be sent by the consultant, and the task force team or working group should be set up and trained for about two years with "establishment of quality assurance system at P.T. Boma Stork" as the main theme under the supervision of the specialist.

As for the structure of the team or group, the quality control section chief should be the leader, and the engineers and foremen assigned by sections such as production control section, related work section and purchasing section should be members. In other words, quality assurance can be attained only when purchasing method, education of the outside makers, machining procedure and method and so on are improved.

By the method above, not only "the quality assurance system" is established but also the knowledge and acknowledgement of all members of the participated team and group could be improved.

2) Contents and method of skill training

① Welding (including automatic welding), beveling and forming skill.

② Non-destructive inspection conduct skill and judgement such as γ-ray and supersonic examiner.

These should be emphasized and studied thoroughly.

The instructor for ① should be invited from overseas, and the specialist who is in charge of (2).1) could be the instructor for ②.

Further, as for the operation training on the newly introduced facilities, the erection supervisor of suppliers could teach during the erection period and commissioning period. But the annealing furnace that requires temperature control should be covered by the instructor of ①.

3) Training plan

The training plan mentioned in 1) and 2) is shown in Table 5-2 Training Program. Finally, it is no exaggeration to say that achievement of training will depend on enthusiasm of the trainee and interest of the top management.

Boma-Stork Pasuruan work shop

Table 5-1 Personnel Program

ORGANI-ZATION	MAIN FUNCTION	PERSONNEL PLAN							
		1984		1989		1994		1999	
		MANAGER ENGINEER & STAFF	WORKER	MANAGER ENGINEER & STAFF	WORKER	MANAGER ENGINEER & STAFF	WORKER	MANAGER ENGINEER & STAFF	WORKER
General manager		1		1		1		1	
Quality control	1) work inspection in factory 2) material & subcontract inspection	7		5	10	5	12	5	14
Control	1) expediting of material & subcontract 2) maintenance 3) storing & inventry control	69		5	60	5	65	5	70
Factory manager		1		1		1		1	
Production planning (including product coordinator)	1) production scheduling 2) man/machine-hours planning 3) work coordination 4) product coordination	39		10	40	10	45	10	48
Production	1) plate work preparation 2) plate work welding 3) plate work fitting & assembling 4) machining 5) finishing & assembling 6) material & tool handling	341*		15	288	15	295	15	285
TOTAL				37	398	37	417	37	417
		458*		425		454		454	

NOTE: (1) Members of Engineering Dep't, Erection Dep't and Secretary are not included in the above figures.
(2) * marked figures in 1984 are including the workers for site construction and field fabrication.

Table 5-2 Training Plan

P.T. Boma Stork Pusuruan Work Shop

Category	Description and method of training	Trainees	Training Schedule 1988 1989 1990	Training cost
Training of production eingineering	With "establishment of quality assurance system" the main theme, organize a task force team consisting of members of P.T. Boma-Stork to be trained under the supervision of the instructor sent by the training consultant. As a result, establish the quality assurance system including the quality control manual and enhance quality control oriented mind of the members and inspection technique of the members	Engineers and foremen of the sections related to quality control and production technique	⟶	Instructor 1 x QC engineer 1 x Specialist Cost: 133.8 million Yen
Skill training	1) Conduct the training through practice including machining and measuring technique based on the "on-the-job training" system	Select from the foremen and workers of production and quality control sections. The following are included: (1) γ -ray equipment operator (2) Supersonic examiner operator		
	2) Commissioning engineer sent by facilities supplier teach operation/ maintenance procedures through practice by the on-the-job training system	Workers and meintenance staff who are in charge of the following job (1) Floor type boring/milling machine (2) Vertical lathe (3) Automatic welder (4) Stress relieving furnace (5) Hydraulic press (6) Bending roller	→ → → → → →	Facilities cost includes training cost

Chapter 5

TOTAL CAPITAL REQUIREMENT AND FINANCING PLAN

Chapter 5. Total Capital Requirement and Financing Plan

5.1 Total Capital Requirement

5.1.1 General

Total Capital Requirements required for the project are calculated based on the investment cost of each factory which is described in Chapter 4. At this stage, some basic conditions are not given, because the financial sources have not been decided yet. Therefore, following major premises are applied to the calculation of total capital requirement considering the results of field survey in Indonesia.

(1) Exchange rate of currencies (as of August, 1984)

¥1 = 4.31 Rupiah
US$1 = 1,035 Rupiah

(2) Base of prices

The investment cost is calculated first based on 1984 prices. Then, each cost is escalated according to the disbursement schedule of corresponding cost items.

(3) Price escalation

Annual price escalations are set at 2% for foreign currency portion and 10% for local currency portion.

(4) Taxes

Import duties are considered to be free. Sales tax is considered to be 10% for the contracted price.

5.1.2 Summary for Total Capital Requirement

Table 5-1 shows summary of total capital requirement. As of today, the financing source is not fixed yet, therefore the total capital requirement is calculated using following premises:

(1) Interest rate : 10%/year

(2) Interest during construction : Capitalized

(3) Debt equity ratio : Debt 65%, Equity 35%

Table 5-1 Total Capital Requirement

(Unit: million Yen)

	BARATA			BBI			BOMA STORK			TOTAL		
	Foreign	Domestic	Total	Foreign	Domestic	Total	Foreign	Domestic	Total	Foreign	Domestic	Total
Base Project Cost	17,287.5	8,501.0	25,788.5	8,173.1	5,181.5	13,354.6	1,894.8	485.3	2,380.1	27,355.4	14,167.8	41,523.2
Contingencies												
- Physical	518.5	594.9	1,113.4	245.1	362.7	607.8	56.8	34.0	90.8	820.4	991.6	1,812.0
- Price	1,146.7	2,734.6	3,881.3	583.1	1,742.9	2,326.0	118.7	205.3	324.0	1,848.5	4,682.8	6,531.3
Project Cost	18,952.7	11,830.5	30,783.2	9,001.3	7,287.1	16,288.4	2,070.3	724.6	2,794.9	30,024.3	19,842.2	49,866.5
Tax and Duties	-	3,078.3	3,078.3	-	1,628.8	1,628.8	-	279.5	279.5	-	4,986.6	4,986.6
Marketing Training (Incl. Contingencies)	159.8	76.6	236.4	79.9	38.3	118.2	79.9	38.3	118.2	319.6	153.2	472.8
Total Project Cost	19,112.5	14,985.4	34,097.9	9,081.2	8,954.2	18,035.4	2,150.2	1,042.4	3,192.6	30,343.9	24,982.0	55,325.9
Interest During Construction	2,287.0	2,103.3	4,390.3	934.6	1,171.8	2,106.4	278.5	98.4	376.9	3,500.1	3,373.5	6,873.6
Total Capital Requirement	21,399.5	17,088.7	38,488.2	10,015.8	10,126.0	20,141.8	2,428.7	1,140.8	3,569.5	33,844.0	28,355.5	62,199.5
		(73,652.3)			(43,643.1)			(4,916.8)			(122,212.2)	

Exchange rate of currencies in the calculation is fixed at 1 Yen = 4.31 Rupiah
The capital requirement shown in the parenthesis is the domestic portion of capital requirement exhibited by Rupiah.

5.1.3 Break-down of Total Capital Requirement

Following are break-down of total capital requirement calculation.

(1) Base project cost

The base project cost is given by the break-down of following cost items based on the investment cost calculation of each factory as described in Chapter 4.

1) Land preparation

The land preparation cost is separately calculated in case that the share of the cost is comparatively large in the construction cost.

2) Machinery and equipment

Costs for machinery and equipment consist of that for machine tools, facilities for plate work, handling facilities, auxiliary facilities, electrical facilities and repair parts, etc. In case that the share of electrical facilities is large in investment cost, the cost for electrical facilities is described separately.

3) Ocean freight and insurance

The costs include the ocean freight and insurance for whole machinery, equipment and raw materials to be imported from abroad.

4) Inland transportation

Inland transportation costs are transportation costs of machinery etc. from the nearest foreign trade port to the factory sites.

5) Civil & erection

Costs for civil and erection consist of costs needed for foundation and erection for machine tools, facilities for plate work, handling facilities and electrical facilities.

6) Building

Costs of buildings consist of costs needed for the construction materials, labor costs, etc.

7) Construction expenses

Construction expenses are separately counted only for those factories where temporary facilities are needed for the construction works.

8) Engineering fee

Engineering fee is the costs needed for manpower for supervision of installation of machinery and equipment, etc.

9) Training fee

Fee for the instructors needed to train the personnel of technical and marketing divisions is calculated as training fees. In financial analysis in the next chapter, the training fee before the start-up operation is considered as pre-operation expense. As for the training fee after the start-up, it is considered as re-investment.

10) Others

Expenses needed for detailed design are counted in the category in other costs.

(2) Physical contingencies

Costs for physical contingencies are those prepared in case of cost-over-run in the capital requirement due to the miscellaneous changes in design and unknown factors which could not be foreseen at the time of field survey. 3% and 7% for the foreign currency portion and domestic currency portion of the base project costs, respectively, are employed as the physical contingencies.

(3) Price contingencies

Costs for price contingencies are those required in preparation of future increase in costs due to inflation. With the rate of escalation assumed to be 2% for foreign currency and 10% for domestic currency, these costs are employed for each item for the period from 1984 to the year when the costs are supposed to be disbursed.

1) Escalation (Foreign currency portion)

Rate of escalation for the prices of foreign currency portion is assumed on the bases of price changes in the machine tools for metal products and ordinary steel products in Japan. Table 5-2 shows changes in domestic wholesale price index and export price index in Japan from 1975 to 1983 for machine tools for metal products and ordinary steel products respectively.

The table shows evident ease-down in price increase since 1980. Machine suppliers in Japan are of the opinion that price increase for the coming several years will be 1-3% annually judging from overall factors including economic situations both in Japan and the worldwide and trend of the change of productivity and production costs. Based on these pieces of information, annual 2% increase in the prices for the foreign currency portion of this project are adopted as price contingency for foreign currency portion.

Table 5-2 Price Index

	Machine Tools for Metal Products		Ordinary Steel Products	
	Domestic Whole Sale Price Index	Export Price Index	Domestic Whole Sale Price Index	Export Price Index
1975	79.1	87.2	75.0	85.7
1976	81.8	92.2	80.7	82.0
1977	84.7	91.4	82.4	76.9
1978	87.0	85.6	85.8	76.6
1979	93.4	98.4	91.5	89.2
1980	100.0	100.0	100.0	100.0
1981	102.4	98.0	98.2	111.4
1982	101.6	107.9	99.4	115.8
1983	99.2	106.4	100.7	95.0
Average (1975-1983)	2.9%	2.5%	3.8%	1.3%
Average (1980-1983)	-0.3%	2.1%	0.2%	-1.7%

(Source) Price Indeces Annual, Bank of Japan

2) Escalation (Domestic currency portion)

As to the price escalation for the domestic currency portion, estimates are made on the basis of changes in price index of construction materials and consumer price index in Indonesia. Table 5-3 shows changes in Price Index of Construction Materials. Table 5-4 shows changes in Consumer Price Index. Based on the judgement obtained form these tables, annual 10% increase in the prices are adopted for the domestic currency portion of this project.

Table 5-3 Price Index for Construction Material

	General	Residential Building	Non Residential Building	Public Work in the Agriculture Sector	Public Work in Road & Bridge	Installation of Electricity	Other Construction	Maintenance of Building
1975	241	243	235	269	241	252	237	241
1976	250	252	244	277	247	265	245	250
1977	264	272	259	288	262	275	258	259
1978	287	297	282	308	284	295	279	280
1979	376	394	370	399	375	386	363	363
1980	457	478	447	498	480	445	440	440
1981	468	464	454	573	494	428	474	472
1982	506	503	491	638	542	456	514	516
1983	570	564	557	726	607	512	581	586

Average (1975-1983) 11.4% for general
Average (1980-1983) 7.7% for general
(Source) BPS

Table 5-4 Consumer Price Index

	Consumer Price Index in 17 Cities					
	Rp Term	Change (%)	US$ Exchange Rate	US$ Term	¥ Exchange Rate	¥ Term
1975	80.6	19.6	420	80.6	1.48	80.6
1976	92.1	14.2	421	91.9	1.47	81.1
1977	103.0	11.8	421	102.8	1.74	87.6
1978	109.9	6.7	455	101.4	2.00	81.3
1979	143.1	30.2	632	94.1	2.80	75.6
1980	167.6	17.1	634	111.0	3.08	80.5
1981	179.8	7.3	643	117.4	3.03	88.7
1982	197.9	10.1	592	120.1	2.80	101.1
1983	221.5	11.9	938	99.1	4.27	76.8

Average (1975-1983) 13.5% for Rp Term
Average (1980-1983) 97% for Rp Term
(Source) BPS

The consumer price index converted in yen is stable for the last eight years. This tendency is considered not to change in the near future, taking the exchange rate of Rupiah to yen into account. However, since the future exchange rate estimation is difficult, the total capital requirement is calculated based on the fixed rate, 1 Yen = Rp 4.31, according to the discussion with Indonesian counterpart.

(4) Tax and duties

The taxation system in Indonesia consists mainly of indirect tax. When materials are procured from overseas, import duties and commodity taxes are levied. In case of procurement from domestic sources, commodity taxes are levied. For the services such as engineering and construction, taxes are also levied.

Substantial revisions in the taxation system was promulgated as of January, 1984. Taxes so far known by the investigations are as follows. It reflects new system of taxation that would come into force from July, 1984.

- Value added tax 10%
- Other tax 4%

For imported materials for which domestic supply can also be possible, tax will be levied in addition to import duties.

Value added taxes for imported goods are applicable to the value of (CIF + Import Duty) × 1.05. This 5% represents expected profit for the importer, which is to be applied even in the case of direct import. The tax rate of 10% is that of new system for the value added tax.

In any case, some assumptions must be made since the sources of loan and the priority for the project are still not to be fixed. Accordingly, following assumptions are made so that taxes will not be excessively high. In setting up the tax rate for this project, attention has been paid to the fact that there have been several projects freed from any taxes due to the intention of the loan suppliers.

a) Import Duties for imported equipment and materials

No duties will be levied.

b) Taxes for the contractors

Total amount of prior payment based on agreements, if any, value added tax and other taxes is set as 10% of the contracted price. This condition is used for base case.

(5) Working capital

Working capital is that necessary for an enterprise to go on with the daily production activities without difficulties. This capital consists of the initial working capital (additional working capital) and running working capital. Since the developments on the existing designated factories are the object of this study, no initial working capital is calculated, since the amounts listed as cash on hand in the balance sheet are assumed to meet with any demand for capitals in contingent need. The running working capital is defined as the materials inventory, products inventory and accounts receivable less accounts payable. The capitals are described in the financial statements.

5.2 Financing and Interest during Construction

5.2.1 Financing Plan

Based on the discussions made during the field survey, debt equity ratio is fixed to be 65% and 35% respectively. The terms and conditions for the loan are as follows:

Interest rate:	10% annually
Repayment:	10 years
Installment:	10 times
Grace period:	2 years after inauguration
Method of repayment:	Equal principal installment
Others:	Loan at the beginning of the year and calculation of interest at the end of the year

Case studies are made where the capital is 50% and where the interest rate is 5% annually, for reference.

5.2.2 Interest during Construction

Interest during construction is calculated on the assumption that 65% of requirements for the foreign and domestic currency portions will be met by the loan and on the basis of the expenditure schedule calculated from both the above terms and conditions for the loan and the construction program. Expenditures after 1989, that is, training fees scheduled for 1989 and 1990 are not included in the calculation of the interest during construction, but included in reinvestment after plant operation.

Table 5-5 shows the Interest during Construction for the base case.

Table 5-5 Interest During Construction

(Unit: million Yen)

	1985	1986	1987	1988
BARATA				
Debt				
Foreign Currency Portion	167.4	626.1	9,029.4	4,550.9
Domestic Currency Portion	360.9	3,053.5	4,427.0	3,677.6
Equity	258.6	1,775.3	6,381.1	3,163.2
IDC				
Foreign Currency Portion	15.2	72.1	893.0	1,306.7
Domestic Currency Portion	32.8	310.4	712.9	1,047.2
BBI				
Debt				
Foreign Currency Portion	87.9	345.4	2,606.9	3,678.7
Domestic Currency Portion	127.1	1,142.1	3,379.5	2,195.0
Equity	105.2	717.6	2,847.0	2,498.9
IDC				
Foreign Currency Portion	8.0	39.4	276.4	610.8
Domestic Currency Portion	11.6	115.4	422.6	622.2
BOMA-STORK				
Debt				
Foreign Currency Portion	20.2	13.7	1,354.5	232.9
Domestic Currency Portion	12.2	20.4	266.2	439.7
Equity	15.9	15.1	790.1	246.6
IDC				
Foreign Currency Portion	1.8	3.1	126.2	147.4
Domestic Currency Portion	1.1	3.0	27.2	67.1

Table 5-6 shows the Summary of Interest during Construction for reference case.

Table 5-6 Summary of Interest During Construction

(Unit: million Yen)

		BARATA			B B I			BOMA-STORK		
Equity	Interest Rate	Foreign Portion	Domestic Portion	Total	Foreign Portion	Domestic Portion	Total	Foreign Portion	Domestic Portion	Total
35%	10%	2,287.0	2,103.3	4,390.3	934.6	1,171.8	2,106.4	278.5	98.4	376.9
	5%	1,116.3	1,015.3	2,131.6	457.7	568.5	1,026.2	135.8	48.4	184.2
50%	10%	1,759.3	1,617.9	3,377.2	718.8	901.4	1,620.2	214.3	75.7	290.0
	5%	858.8	781.0	1,639.8	352.1	437.3	789.4	104.5	37.1	141.6

5.3 Disbursement of Total Capital Requirement

The break-down of total capital requirement and disbursement of capitals are summarized in Table 5-7 - 5-16.

Table 5-7 Total Capital Requirement

(BARATA Surabaya, Gresik, Jakarta, Tegal) (Unit : million Yen)

		Foreign	Domestic	Total
1.	Land Preparation	69.6	546.6	616.2
2.	Electricity & Instrument	355.4	600.4	955.8
3.	Machinery & Equipment (FOB)	13,172.1	0	13,172.1
4.	Ocean Freight, Insurance & Local Handling	642.9	120.8	763.7
5.	Inland Transportation	0	156.8	156.8
6.	Civil & Erection	246.2	3,248.3	3,494.5
7.	Building (Plant & Others)	448.5	2,739.9	3,188.4
8.	Building (Office)	15.4	100.2	115.6
9.	Construction Expenses	0	414.1	414.1
10.	Engineering Fee	1,002.6	177.4	1,180.0
11.	Training Fee	468.6	264.6	733.2
12.	Others	866.2	131.9	998.1
	Base Project Cost	17,287.5	8,501.0	25,788.5
13.	Contingencies			
	- Physical	518.5	594.9	1,113.4
	- Price	1,146.7	2,734.6	3,881.3
		1,665.2	3,329.5	4,994.7
	Project Cost	18,952.7	11,830.5	30,783.2
14.	Tax and Duties	—	3,078.3	3,078.3
15.	Marketing Training (incl. Contingencies)	159.8	76.6	236.4
		159.8	3,154.9	3,314.7
	Total Project Cost	19,112.5	14,985.4	34,097.9
16.	Interest during Construction	2,287.0	2,103.3	4,390.3
	Total Capital Requirement	21,399.5	17,088.7	38,488.2

Table 5-8 Total Capital Requirement (BBI Wahana, Indra)

(Unit : million Yen)

		Foreign	Domestic	Total
1.	Land Preparation	43.1	136.5	179.6
2.	Electricity & Instrument	319.2	606.0	925.2
3.	Machinery & Equipment (FOB)	5,504.7	0	5,504.7
4.	Ocean Freight, Insurance & Local Handling	439.4	104.3	543.7
5.	Inland Transportation	0	98.7	98.7
6.	Civil & Erection	243.8	1,711.0	1,954.8
7.	Building (Plant & Others)	348.0	1,877.7	2,225.7
8.	Building (Office)	18.3	98.8	117.1
9.	Construction Expenses	0	297.4	297.4
10.	Engineering Fee	597.6	129.4	727.0
11.	Training Fee	147.9	112.3	260.2
12.	Others	511.1	9.4	520.5
	Base Project Cost	8,173.1	5,181.5	13,354.6
13.	Contingencies			
	- Physical	245.1	362.7	607.8
	- Price	583.1	1,742.9	2,326.0
		828.2	2,105.6	2,933.8
	Project Cost	9,001.3	7,287.1	16,288.4
14.	Tax and Duties	—	1,628.8	1,628.8
15.	Marketing Training (incl. Contingencies)	79.9	38.3	118.2
		79.9	1,667.1	1,747.0
	Total Project Cost	9,081.2	8,954.2	18,035.4
16.	Interest during Construction	934.6	1,171.8	2,106.4
	Total Capital Requirement	10,015.8	10,126.0	20,141.8

Table 5-9 Total Capital Requirement (BOMA STORK)

(Unit : million Yen)

		Foreign	Domestic	Total
1.	Land Preparation	0	0	0
2.	Machinery & Equipment (FOB)	1,595.3		1,595.3
3.	Ocean Freight, Insurance & Local Handling	47.3	0	47.3
4.	Inland Transportation	0	17.4	17.4
5.	Civil & Erection	0	166.0	166.0
6.	Building (Plant & Others)	38.4	211.2	249.6
7.	Building (Office)	0	0	0
8.	Engineering Fee	56.1	2.4	58.5
9.	Training Fee	96.4	37.4	133.8
10.	Others	61.3	50.9	112.2
	Base Project Cost	1,894.8	485.3	2,380.1
11.	Contingencies			
	- Physical	56.8	34.0	90.8
	- Price	118.7	205.3	324.0
		175.5	239.3	414.8
	Project Cost	2,070.3	724.6	2,794.9
12.	Tax and Duties	—	279.5	279.5
13.	Marketing Training (incl. Contingencies)	79.9	38.3	118.2
		79.9	317.8	397.7
	Total Project Cost	2,150.2	1,042.4	3,192.6
14.	Interest during Construction	278.5	98.4	376.9
	Total Capital Requirement	2,428.7	1,140.8	3,569.5

Table 5-10 Project Cost

BARATA Surabaya

(Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation															
2. Electricity & Instrument															
3. Machinery & Equipment (FOB)					3,686.3								3,686.3		3,686.3
4. Ocean Freight, Insurance & Local Handling					96.2								96.2		96.2
5. Inland Transportation						24.4								24.4	24.4
6. Civil & Erection						98.4		354.6						453.0	453.0
7. Building (Plant & Others)					90.6	81.4		331.3					90.6	412.7	503.3
8. Building (Office)															
Sub-total	0	0	0	0	3,873.1	204.2	0	685.9	0	0	0	0	3,873.1	890.1	4,763.2
9. Engineering Fee					14.9	0.7	58.4	2.8					73.3	3.5	76.8
10. Training Fee							52.2	18.1	69.3	27.2	23.1	9.1	144.6	54.4	199.0
11. Construction Expenses															
12. Others	40.4	14.2	16.6	23.5	23.0	28.7	4.5	7.3					84.5	73.7	158.2
Sub-total	40.4	14.2	16.6	23.5	37.9	29.4	115.1	28.2	69.3	27.2	23.1	9.1	302.4	131.6	434.0
13. Contingencies															
- Physical	1.2	1.0	0.5	1.6	117.3	16.4	3.5	50.0	2.1	1.9	0.7	0.6	125.3	71.5	196.8
- Price	0.8	1.4	0.7	4.9	239.4	77.3	9.5	331.4	7.2	16.6	2.9	7.0	260.5	438.6	699.1
Sub-total	2.0	2.4	1.2	6.5	356.7	93.7	13.0	381.4	9.3	18.5	3.6	7.6	385.8	510.1	895.9
Total	42.4	16.6	17.8	30.0	4,267.7	327.3	128.1	1,095.5	78.6	45.7	26.7	16.7	4,561.3	1,531.8	6,093.1
Project Cost	59.0		47.8		4,595.0		1,223.6		124.3		43.4		6,093.1		6,093.1
14. Tax	5.9		4.8		459.5		122.4		12.4		4.3		609.3		
Total Project Cost excluding Marketing Training	64.9		52.6		5,054.5		1,346.0		136.7		47.7		6,702.4		

Table 5-11 Project Cost

BARATA Gresik

(Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation	36.1	273.2	23.5	177.6									59.6	450.8	510.4
2. Electricity & Instrument					181.0	278.8							181.0	278.8	459.8
3. Machinery & Equipment (FOB)					2,572.5		2,058.0						4,630.5		4,630.5
4. Ocean Freight, Insurance & Local Handling			94.3	22.3	107.8	25.5	89.8	21.3					291.9	69.1	361.0
5. Inland Transportation				21.2		24.2		20.2						65.6	65.6
6. Civil & Erection CIVIL			96.8	1,108.1	52.8	604.4							149.6	1,712.5	1,862.1
6. Civil & Erection ERECT.					6.0	144.1	9.9	156.5					15.9	300.6	316.5
7. Building (Plant & Others)			173.5	1,181.9	65.5	472.8							239.0	1,654.7	1,893.7
8. Building (Office)					10.0	69.0							10.0	69.0	79.0
Sub-total	36.1	273.2	388.1	2,511.1	2,995.6	1,618.8	2,157.7	198.0	0	0	0	0	5,577.5	4,601.1	10,178.6
9. Engineering Fee	123.7	16.4	123.1	23.6	148.4	23.6	123.7	23.6	25.3	7.2			544.2	94.4	638.6
10. Training Fee							9.5	7.2	56.9	43.2	47.4	36.0	113.8	86.4	200.2
11. Construction Expenses		61.1		77.7		77.2		72.0						288.0	288.0
12. Others			85.7	0.5	157.6	3.1	155.9	4.1	29.4				428.6	7.7	436.3
Sub-total	123.7	77.5	208.8	101.8	306.0	103.9	289.1	106.9	111.6	50.4	47.4	36.0	1,086.6	476.5	1,563.1
13. Contingencies															
- Physical	4.8	24.5	17.9	182.9	99.0	120.6	73.4	21.3	3.3	3.5	1.4	2.5	199.8	355.3	555.1
- Price	3.2	35.1	24.1	548.7	202.1	570.2	201.7	151.4	11.6	30.8	6.0	27.8	448.7	1,364.0	1,812.7
Sub-total	8.0	59.6	42.0	731.6	301.1	690.8	275.1	172.7	14.9	34.3	7.4	30.3	648.5	1,719.3	2,367.8
Total	167.8	410.3	638.9	3,344.5	3,602.7	2,413.5	2,721.9	477.6	126.5	84.7	54.8	66.3	7,312.6	6,796.9	14,109.5
Project Cost	578.1		3,983.4		6,016.2		3,199.5		211.2		121.1		14,109.5		
14. Tax	57.8		398.3		601.6		320.0		21.1		12.1		1,410.9		
Total Project Cost excluding Marketing Training	635.9		4,381.7		6,617.8		3,519.5		232.3		133.2		15,520.4		

Table 5-12 Project Cost

(Unit: million Yen)

BARATA Jakarta

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation			5.0	47.9	2.5	24.0	2.5	23.9					10.0	95.8	105.8
2. Electricity & Instrument					107.3	197.9	67.1	123.7					174.4	321.6	496.0
3. Machinery & Equipment (FOB)					2,004.2		1,336.1						3,340.3		3,340.3
4. Ocean Freight, Insurance & Local Handling					133.1	31.6	84.7	20.1					217.8	51.7	269.5
5. Inland Transportation						29.9		19.0						48.9	48.9
6. Civil & Erection CIVIL			11.2	56.6	22.3	113.1	33.5	169.7					67.0	339.4	406.4
6. Civil & Erection ERECT.					7.3	139.3	6.4	121.9					13.7	261.2	274.9
7. Building (Plant & Others)			23.8	137.0	31.8	182.7	47.6	274.0					103.2	593.7	696.9
8. Building (Office)							5.4	31.2					5.4	31.2	36.6
Sub-total			40.0	241.5	2,308.5	718.5	1,583.3	783.5					3,931.8	1,743.5	5,675.3
9. Engineering Fee			67.8	15.4	148.0	33.7	123.3	28.1					339.1	77.2	416.3
10. Training Fee							9.5	7.2	56.9	43.2	47.4	36.0	113.8	86.4	200.2
11. Construction Expenses				25.2		55.0		45.9						126.1	126.1
12. Others			61.1	1.1	133.3	2.3	111.1	2.0					305.5	5.4	310.9
Sub-total			128.9	41.7	281.3	91.0	243.9	83.2	56.9	43.2	47.4	36.0	758.4	295.1	1,053.5
13. Contingencies															
- Physical			5.1	19.8	77.7	56.7	54.8	68.7	1.7	3.0	1.4	2.5	140.7	142.7	283.4
- Price			6.8	59.5	158.5	267.9	150.6	402.2	5.9	26.4	6.0	27.8	327.8	783.8	1,111.6
Sub-total			11.9	79.3	236.2	324.6	205.4	462.9	7.6	29.4	7.4	30.3	468.5	926.5	1,395.0
Total			180.8	362.5	2,826.0	1,134.1	2,032.6	1,329.6	64.5	72.6	54.8	66.3	5,158.7	2,965.1	8,123.8
Project Cost			543.3		3,960.1		3,362.2		137.1		121.1		8,123.8		8,123.8
14. Tax				54.3		396.0		336.2		13.7		12.1		812.4	
Total Project Cost excluding Marketing Training			597.6		4,356.1		3,698.4		150.8		133.2			8,936.2	

Table 5-13 Project Cost

BARATA Tegal (Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation															
2. Electricity & Instrument															
3. Machinery & Equipment (FOB)					1,515.0								1,515.0		1,515.0
4. Ocean Freight, Insurance & Local Handling					37.0								37.0		37.0
5. Inland Transportation						17.9								17.9	17.9
6. Civil & Erection						66.7		114.9						181.6	181.6
7. Building (Plant & Others)					15.7	14.3		64.5					15.7	78.8	94.5
8. Building (Office)															
Sub-total	0	0	0	0	1,567.7	98.9	0	179.4	0	0	0	0	1,567.7	278.3	1,845.0
9. Engineering Fee					44.0	2.2	2.0	0.1					46.0	2.3	48.3
10. Training Fee							45.9	17.1	46.2	18.7	4.3	1.6	96.4	37.4	133.8
11. Construction Expenses															
12. Others	22.7	9.2	13.8	17.2	9.4	17.0	1.7	1.7					47.6	45.1	92.7
Sub-total	22.7	9.2	13.8	17.2	53.4	19.2	49.6	18.9	46.2	18.7	4.3	1.6	190.0	84.8	274.8
13. Contingencies															
- Physical	0.7	0.6	0.4	1.2	48.6	8.3	1.5	13.9	1.4	1.3	0.1	0.1	52.7	25.4	78.1
- Price	0.5	0.9	0.6	3.6	99.2	39.1	4.1	92.0	4.8	11.4	0.5	1.2	109.7	148.2	257.9
Sub-total	1.2	1.5	1.0	4.8	147.8	47.4	5.6	105.9	6.2	12.7	0.6	1.3	162.4	173.6	336.0
Total	23.9	10.7	14.8	22.0	1,768.9	165.5	55.2	304.2	52.4	31.4	4.9	2.9	1,920.1	536.7	2,456.8
Project Cost	34.6		36.8		1,934.4		359.4		83.8		7.8		2,456.8		2,456.8
14. Tax	3.5		3.7		193.4		35.9		8.4		0.8		245.7		
Total Project Cost excluding Marketing Training	38.1		40.5		2,127.8		395.3		92.2		8.6		2,702.5		

Table 5-14 Project Cost

BBI Indra

(Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation															
2. Electricity & Instrument					43.6	87.5	98.0	197.0					141.6	284.5	426.1
3. Machinery & Equipment (FOB)					396.2		891.5						1,287.7		1,287.7
4. Ocean Freight, Insurance & Local Handling							78.3	18.6					78.3	18.6	96.9
5. Inland Transportation								17.6						17.6	17.6
6. Civil & Erection CIVIL							6.0	59.8					6.0	59.8	65.8
6. Civil & Erection ERECT.							8.9	169.2					8.9	169.2	178.1
7. Building (Plant & Others)															
8. Building (Office)															
Sub-total	0	0	0	0	439.8	87.5	1,082.7	462.2	0	0	0	0	1,522.5	549.7	2,072.2
9. Engineering Fee							137.1	41.3					137.1	41.3	178.4
10. Training Fee							2.8	2.2	17.1	12.9	14.2	10.8	34.1	25.9	60.0
11. Construction Expenses								35.9						35.9	35.9
12. Others					43.0	1.0	71.6	1.0					114.6	2.0	116.6
Sub-total	0	0	0	0	43.0	1.0	211.5	80.4	17.1	12.9	14.2	10.8	285.8	105.1	390.9
13. Contingencies															
- Physical					14.5	6.2	38.8	38.0	0.5	0.9	0.4	0.8	54.2	45.9	100.1
- Price					29.6	29.3	106.7	251.8	1.8	7.9	1.8	8.3	139.9	297.3	437.2
Sub-total	0	0	0	0	44.1	35.5	145.5	289.8	2.3	8.8	2.2	9.1	194.1	343.2	537.3
Total	0	0	0	0	526.9	124.0	1,439.7	832.4	19.4	21.7	16.4	19.9	2,002.4	998.0	3,000.4
Project Cost	0		0		650.9		2,272.1		41.1		36.3		3,000.4		3,000.4
14. Tax		0		0		65.1		227.2		4.1		3.6		300.0	
Total Project Cost excluding Marketing Training	0		0		716.0		2,499.3		45.2		39.9			3,300.4	

Table 5-15 Project Cost

BBI Wahana (Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation	20.7	65.5	22.4	71.0									43.1	136.5	179.6
2. Electricity & Instrument					76.1	137.8	101.5	183.7					177.6	321.5	499.1
3. Machinery & Equipment (FOB)					1,807.3		2,409.7						4,217.0		4,217.0
4. Ocean Freight, Insurance & Local Handling			47.1	11.2	188.4	44.7	125.6	29.8					361.1	85.7	446.8
5. Inland Transportation				9.7		38.9		32.5						81.1	81.1
6. Civil & Erection CIVIL			112.8	625.7	100.3	556.2							213.1	1,181.9	1,395.0
6. Civil & Erection ERECT.					7.0	133.4	8.8	166.7					15.8	300.1	315.9
7. Building (Plant & Others)			49.7	268.2	298.3	1,609.5							348.0	1,877.7	2,225.7
8. Building (Office)							18.3	98.8					18.3	98.8	117.1
Sub-total	20.7	65.5	232.0	985.8	2,477.4	2,520.5	2,663.9	511.5	0	0	0	0	5,394.0	4,083.3	9,477.3
9. Engineering Fee	96.4	18.4	128.5	24.6	128.5	24.6	107.1	20.5					460.5	88.1	548.6
10. Training Fee							9.5	7.2	56.9	43.2	47.4	36.0	113.8	86.4	200.2
11. Construction Expenses		44.7		76.5		76.5		63.8						261.5	261.5
12. Others			79.3	1.5	173.0	3.2	144.2	2.7					396.5	7.4	403.9
Sub-total	96.4	63.1	207.8	102.6	301.5	104.3	260.8	94.2	56.9	43.2	47.4	36.0	970.8	443.4	1,414.2
13. Contingencies															
- Physical	3.5	9.0	13.2	76.2	83.4	183.7	87.7	42.4	1.7	3.0	1.4	2.5	190.9	316.8	507.7
- Price	2.3	12.9	17.8	228.6	170.1	868.8	241.1	281.1	5.9	26.4	6.0	27.8	443.2	1,445.6	1,888.8
Sub-total	5.8	21.9	31.0	304.8	253.5	1,052.5	328.8	323.5	7.6	29.4	7.4	30.3	634.1	1,762.4	2,396.5
Total	122.9	150.5	470.8	1,393.2	3,032.4	3,677.3	3,253.5	929.2	64.5	72.6	54.8	66.3	6,998.9	6,289.1	13,288.0
Project Cost	273.4		1,864.0		6,709.7		4,182.7		137.1		121.1		13,288.0		13,288.0
14. Tax		27.3		186.4		671.0		418.3		13.7		12.1	1,328.8		
Total Project Cost excluding Marketing Training	300.7		2,050.4		7,380.7		4,601.0		150.8		133.2			14,616.8	

Table 5-16 Project Cost

Boma Stock Pasuran

(Unit: million Yen)

	1985		1986		1987		1988		1989		1990		Total		
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Total
1. Land Preparation															
2. Electricity & Instrument															
3. Machinery & Equipment (FOB)					1,595.3								1,595.3		1,595.3
4. Ocean Freight, Insurance & Local Handling					47.3								47.3		47.3
5. Inland Transportation						17.4								17.4	17.4
6. Civil & Erection						38.6		127.4						166.0	166.0
7. Building (Plant & Others)					38.4	33.4		177.8					38.4	211.2	249.6
8. Building (Office)															
Sub-total	0	0	0	0	1,681.0	89.4	0	305.2	0	0	0	0	1,681.0	394.6	2,075.6
9. Engineering Fee					9.4	0.5	46.7	1.9					56.1	2.4	58.5
10. Training Fee							45.9	17.1	46.2	18.7	4.3	1.6	96.4	37.4	133.8
11. Construction Expenses															
12. Others	27	11	15.2	17.9	17.4	20.3	1.7	1.7					61.3	50.9	112.2
Sub-total	27	11	15.2	17.9	26.8	20.8	94.3	20.7	46.2	18.7	4.3	1.6	213.8	90.7	304.5
13. Contingencies															
- Physical	0.8	0.8	0.5	1.3	51.2	7.7	2.8	22.8	1.4	1.3	0.1	0.1	56.8	34.0	90.8
- Price	0.5	1.1	0.6	3.8	104.5	36.5	7.8	151.3	4.8	11.4	0.5	1.2	118.7	205.3	324.0
Sub-total	1.3	1.9	1.1	5.1	155.7	44.2	10.6	174.1	6.2	12.7	0.6	1.3	175.5	239.3	414.8
Total	28.3	12.9	16.3	23.0	1,863.5	154.4	104.9	500.0	52.4	31.4	4.9	2.9	2,070.3	724.6	2,794.9
Project Cost	41.2		39.3		2,017.9		604.9		83.8		7.8		2,794.9		2,794.9
14. Tax		4.1		3.9		201.8		60.5		8.4		0.8		279.5	
Total Project Cost excluding Marketing Training	45.3		43.2		2,219.7		665.4		92.2		8.6			3,074.4	

Chapter 6

FINANCIAL ANALYSIS

Chapter 6. Financial Analysis

The financial analysis is carried out for each company, P.T. BARATA, P.T. BBI and P.T. BOMA STORK. The BARATA factories to be renovated include factories of Surabaya (Machine), Jakarta, Tegal and Gresik (relocation of factory). The BBI factories to be renovated include Indra Unit and Wahana Unit (relocation of factory).

All of the prices employed in the financial analysis are the fixed prices in 1984. Accordingly, the total capital requirement for the renovation project is based on 1984 price, excluding cost derived from price contingency. Other costs such as product price and production costs are calculated at 1984 price.

6.1 Principles for Financial Analysis

When development works are made on the existing designated factories and the effect of them are to be judged, it is normally difficult to identify the effect of the new investment since effects of both the old and new investments are overlapped. Accordingly, evaluations are made in the study as follows:

(1) Reviews are made for the year-to-year profit/loss of the existing plant facilities assuming that no development works are performed.

(2) Reviews are made for the year-to-year profit/loss of the existing plants assuming that development works are performed and compared with the result of the reviews as made in the preceding clause (1).

(3) In order to clarify the effect of the development works, internal rate of return (IRR) is calculated on the assumption that the difference between the case where the development works are performed and the case where not. In the calculation only the costs for construction for the renovation are as investment.

(4) Reviews are made for overall year-to-year financial statements in order to clarify the financial situation of designated companies in case that investment in construction for development works is made.

6.2 Analysis for Current Situations

6.2.1 Production

The production record of each company is shown in Table 6-1. As is obvious in the table, their production volume differs from year to year. This is because they mainly manufacture equipment after receiving order which fluctuates year by year.

Table 6-1 Production Record

(Unit: Ton)

	1980	1981	1982	1983
BARATA				
Surabaya Machine	1,684	1,752	2,075	2,595
Surabaya Structure	3,800	1,100	700	5,300
Jakarta	1,484	1,245	1,616	1,771
Tegal	773	800	800	10,671
Total	7,741	4,897	5,191	10,337
BOMA STORK	707	1,144	1,859	2,409

BBI: It was reported that the production of BBI (Indra) reached 4,800 T/Y in 1983.

6.2.2 Sales Revenue and Production Cost

Table 6-2 summarizes the sales revenue. The unit sale price can not be calculated because of following reasons:

When the raw materials are provided from customers, the sales revenue becomes small even if the company processes big volume of materials. In this case, the apparent unit sale price decreases. In some instance, there is some discrepancy in time between the completion of products and sale of products in terms of accounting. In addition, the products are varied and some unit sale price for the past are not available.

Table 6-2 Sales Revenue

(Unit: million Rp.)

	1980	1981	1982	1983
BARATA				
Surabaya Machine	1,462.1	1,476.0	1,746.2	2,092.7
Surabaya Structure	4,627.3	3,780.3	4,146.7	4,485.2
Jakarta	2,004.9	1,721.5	1,649.0	2,420.6
Tegal	1,122.7	1,100.5	888.7	1,120.8
Total	9,217.0	8,078.3	8,430.6	10,119.3
BBI	1,989.0	6,824.0	6,684.0	7,428.0
BOMA STORK	1,720.1	4,861.9	5,329.1	13,432.5

Table 6-3 summarizes the cost of goods sold. For the break-down of production cost, it is shown in Appendix.

Table 6-3 Cost of Goods Sold

(Unit: million Rp.)

	1980	1981	1982	1983
BARATA				
Surabaya Machine	1,081.6	1,134.8	1,284.1	1,687.2
Surabaya Structure	4,106.4	3,416.7	3,440.0	3,958.6
Jakarta	1,826.0	1,557.6	1,451.2	1,834.4
Tegal	914.3	921.0	707.6	937.7
Total	7,928.3	7,030.1	6,882.9	8,417.9
BBI	1,836.0	5,852.0	6,167.0	6,157.0
BOMA STORK	n.a.	n.a.	n.a.	n.a.

6.2.3 Profit and Loss

Tables 6-4 through 6-6 show the income statement from 1979 to 1983.

Table 6-4 Income Statement

BARATA
(Surabaya, Jakarta, Tegal)

(Unit: million Rp.)

Description	1979	1980	1981	1982	1983
Profit on Sales					
Net Sales	7,636	9,217	8,078	8,431	10,119
Cost of sales	6,152	7,928	7,030	6,883	8,418
Gross profit	1,484	1,289	1,048	1,548	1,702
Calculation Defferences	72	253	36	142	-
Operating Expenses					
Administration expenses	619	796	898	993	606
Sales expenses	250	316	316	323	885
Total	869	1,112	1,214	1,316	1,491
Interest	132	80	225	86	102
Operating Profit/Loss	555	350	(355)	4	109
MISC. Income & Expenses					
Misc income	69	44	48	84	92
Misc expenses	121	206	46	103	120
Total	(52)	(162)	2	(19)	(27)
Profit Balance of the Terms	503	188	(353)	(15)	82

Table 6-5 Income Statement
(BBI Indra)

(Unit: million Rp.)

	1979	1980	1981	1982	1983
Sales					
Sales	1,209	1,989	6,824	6,684	7,428
Sales Discount	-	-	-	-	-
Net Sales	1,209	1,989	6,824	6,684	7,428
Cost of Good Sold	1,182	1,836	5,852	6,167	6,157
Gross profit	27	153	972	517	1,270
Operational Expenses					
Administration expenses	259	256	308	299	383
Marketing expenses	24	43	130	173	177
	283	297	438	472	560
Net Profit/losses	(256)	(144)	534	45	710
Non Operational Revenues and Expenses					
Non operational revenues	166	64	61	119	1,906
Non operational expenses	92	36	49	209	304
	74	28	12	(90)	1,601
Profit/losses before interest	(182)	(116)	546	(45)	(2,312)
Contribution	-	-	-	-	330
Interest	272	375	563	341	117
Profit/losses before tax	(454)	(491)	(17)	(386)	1,865
Estimated Texes	-	-	-	-	-
Net Profit	(454)	(491)	(17)	(386)	1,865

Table 6-6 Income Statement

(BOMA STORK)

(Unit: million Rp.)

	1979	1980	1981	1982	1983
Sales					
Sales	1,633	1,720	4,862	5,329	13,433
Sales commission, Licence fee	(58)	(48)	(19)	(48)	(50)
Net Sales	1,575	1,672	4,843	5,280	13,383
Direct cost					
Direct wages					
Consumption of raw materials	88	70	115	177	155
Service and materials from third parties	1,143	587	1,139	2,142	1,392
	1,105	1,272	5,060	11,326	2,617
	(2,336)	(1,930)	(6,314)	(13,645)	(4,164)
Indirect Cost					
Personnel expenses	276	336	397	464	516
General & administrative expenses	225	232	257	327	390
Depreciation	154	124	147	154	153
	(655)	(692)	(801)	(954)	(1,059)
Work in Progress					
As of January 1,	(716)	(1,767)	(2,216)	(4,070)	(13,150)
As of December 31,	1,767	2,126	4,070	13,150	4,479
Internal orders	308	689	522	811	678
	1,359	1,048	2,467	9,891	(7,993)
Income from Operation	(58)	(97)	194	581	168
Other Income (Expenses)					
Income		54	31	85	344
Expenses		(140)	(225)	(365)	(394)
		(86)	(194)	(280)	(50)
Net income (loss) before unrealized exchange rate difference FMO loan	(72)	11	1	300	118
Unrealized exchange rate difference FMO loan	79	52	50	5	(92)
	7	63	51	305	26
Accumulated Earning (Losses) at the Beginning of the Year					
Exclusive of unrealized exchange rate difference FMO loan	(197)	(269)	(258)	(258)	42
Unrealized exchange rate difference FMO loan	(495)	(416)	(363)	(312)	(308)
Total	(692)	(685)	(621)	(570)	(266)
Accumulated Earging (Losses) At the End of the Year					
Exclusive of unrealized exchange rate difference FMO loan	(269)	(258)	(258)	43	161
Unrealized exchange rate difference FMO loan	(416)	(363)	(312)	(308)	(400)
Total	(685)	(621)	(570)	(264)	(239)

6.3 Analysis for the Cases Where Development Works are not Made

Tables 6-7 through 6-9 show the Income Statement in the case where the development works are not made in the designated companies.

The sales revenue and expenses are set by reviewing the actual record in 1983 and the budget in 1984 of each company. The calculation is made assuming that the sales revenue, and costs for raw materials, labor, overhead, etc. are not changed and constant in the future.

Each factory of BABIBO to be studied are very old. In order to keep the sufficient production level, they make reinvestment, although it is small. In this analysis, the reinvestment of maintenance to keep the production as it is assumed to be at almost the same level of the present reinvestment.

Table 6-7 BARATA

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Costs & Expenses										
Cost of Goods Sold	2095	2098	2100	2101	2104	2105	2107	2109	2110	2112
Initial Product Inventory	28	28	28	28	28	28	28	28	28	28
Production Cost	2095	2098	2100	2101	2104	2106	2107	2109	2110	2112
Final Product Inventory	28	28	28	28	28	28	28	28	28	28
Selling Expenses	93	93	93	93	93	93	93	93	93	93
General Administ. Expense	258	258	258	258	258	258	258	258	258	258
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	2446	2449	2451	2452	2455	2456	2458	2460	2461	2463
Income Before Income Tax	181	179	176	175	172	171	169	167	166	164
Income Tax	62	61	60	60	59	58	58	57	57	56
Income After Income Tax	119	117	116	115	113	112	111	110	109	108

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Costs & Expenses										
Cost of Goods Sold	2113	2114	2116	2117	2118	2119	2121	2122	2123	2123
Initial Product Inventory	28	28	28	28	28	28	28	28	28	28
Production Cost	2113	2114	2116	2117	2118	2119	2121	2122	2123	2123
Final Product Inventory	28	28	28	28	28	28	28	28	28	28
Selling Expenses	93	93	93	93	93	93	93	93	93	93
General Administ. Expense	258	258	258	258	258	258	258	258	258	258
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	2464	2465	2467	2468	2469	2470	2472	2473	2474	2474
Income Before Income Tax	163	162	160	159	158	157	155	154	153	153
Income Tax	56	55	55	54	54	53	53	53	52	52
Income After Income Tax	107	106	106	105	104	103	102	102	101	101

Table 6-8 BBI

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM$) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Costs & Expenses										
Cost of Goods Sold	1536	1536	1536	1537	1539	1540	1542	1543	1544	1546
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	1536	1536	1536	1537	1539	1540	1542	1543	1544	1546
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	45	45	45	45	45	45	45	45	45	45
General Administ. Expense	98	98	98	98	98	98	98	98	98	98
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	120	119	118	118	118	118	119	120	120	121
Sub-Total	1799	1798	1798	1798	1799	1801	1803	1806	1807	1810
Income Before Income Tax	13	14	14	14	13	11	9	6	5	2
Income Tax	0	0	1	4	3	2	2	1	1	0
Income After Income Tax	13	14	14	11	10	8	7	5	4	2

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Costs & Expenses										
Cost of Goods Sold	1547	1549	1550	1551	1552	1554	1555	1556	1557	1558
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	1547	1549	1550	1551	1552	1554	1555	1556	1557	1558
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	45	45	45	45	45	45	45	45	45	45
General Administ. Expense	98	98	98	98	98	98	98	98	98	98
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	123	125	128	131	134	139	145	152	160	170
Sub-Total	1813	1817	1820	1824	1829	1836	1843	1851	1860	1871
Income Before Income Tax	-1	-5	-8	-12	-17	-24	-31	-39	-48	-59
Income Tax	0	0	0	0	0	0	0	0	0	0
Income After Income Tax	-1	-5	-8	-12	-17	-24	-31	-39	-48	-59

Table 6-9 BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BOMA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	1337	1337	1337	1337	1337	1337	1337	1337	1337	1337
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1337	1337	1337	1337	1337	1337	1337	1337	1337	1337
Costs & Expenses										
Cost of Goods Sold	1084	1085	1086	1087	1089	1090	1092	1093	1094	1096
Initial Product Inventory	33	33	33	33	33	33	33	33	33	33
Production Cost	1084	1085	1086	1087	1089	1090	1092	1093	1094	1096
Final Product Inventory	33	33	33	33	33	33	33	33	33	33
Selling Expenses	11	11	11	11	11	11	11	11	11	11
General Administ. Expense	68	68	68	68	68	68	68	68	68	68
Interest on Long Term Loan	8	7	5	4	3	1	0	0	0	0
Interest on Short Term Loan	86	82	77	72	66	60	54	42	28	13
Sub-Total	1257	1252	1248	1242	1237	1231	1224	1213	1201	1188
Income Before Income Tax	80	85	89	95	100	106	113	124	136	149
Income Tax	27	28	30	32	34	36	38	42	46	51
Income After Income Tax	53	56	59	63	67	70	75	82	90	98

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	1337	1337	1337	1337	1337	1337	1337	1337	1337	1337
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1337	1337	1337	1337	1337	1337	1337	1337	1337	1337
Costs & Expenses										
Cost of Goods Sold	1097	1098	1099	1100	1102	1103	1104	1105	1106	1107
Initial Product Inventory	33	33	33	33	33	33	33	33	33	33
Production Cost	1097	1098	1099	1100	1102	1103	1104	1105	1106	1107
Final Product Inventory	33	33	33	33	33	33	33	33	33	33
Selling Expenses	11	11	11	11	11	11	11	11	11	11
General Administ. Expense	68	68	68	68	68	68	68	68	68	68
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	1176	1177	1178	1179	1181	1182	1183	1184	1185	1186
Income Before Income Tax	161	160	159	158	156	155	154	153	152	151
Income Tax	55	55	54	54	53	53	53	52	52	52
Income After Income Tax	106	105	105	104	103	102	101	101	100	100

6.4 Analysis for the Cases Where Development Work are Made

6.4.1 Production Plan

Table 6-10 shows the Production Plan prepared on the basis of the production capacity of each factory and the size of the markets.

In 1989, the first year of operation, the production volume is kept at relatively low level taking the degree of skill of workers, the market size, etc. into consideration. The production volume is increased up to 1993 when the capacity is fulfilled. Hence the production program is prepared.

Table 6-10 Production Plan

(Unit : Ton)

	BARATA					BBI			BOMA STORK	TOTAL
1989	Surabaya	Gresik	Jakarta	Tegal	Total	Indra	Wahana	Total		
Structure	-	7,076	5,260	1,420	13,756	8,445	75	8,520	3,140	25,416
Plate	90	8,329	5,568	1,510	15,497	783	9,432	10,215	6,185	31,897
Machine	3,277	-	-	1,104	4,381	1,493	-	1,493	684	6,558
Total	3,367	15,405	10,828	4,034	33,634	10,721	9,507	20,228	10,009	63,871
1994										
Structure	-	9,435	7,013	1,520	17,968	11,260	100	11,360	3,140	32,468
Plate	159	11,105	7,424	1,610	20,298	1,044	12,576	13,620	7,380	41,298
Machine	4,964	-	-	1,744	6,708	1,990	-	1,990	709	9,407
Total	5,123	20,540	14,437	4,874	44,974	14,294	12,676	26,970	11,229	83,173
1999										
Structure	-	9,435	7,013	1,730	18,178	11,260	100	11,360	3,140	32,678
Plate	164	11,105	7,424	1,890	20,583	1,044	12,576	13,620	7,380	41,583
Machine	6,094	-	-	1,853	7,947	1,990	-	1,990	724	10,661
Total	6,258	20,540	14,437	5,473	46,708	14,294	12,676	26,970	11,244	84,922

6.4.2 Finished and Half-finished Products Inventory

Inventories for the finished and half-finished products are set on the basis of the current level of each factory. However, as the inventory of the products for B.B.I is found to be considerably large, the inventory is limited to the same level before the development works are conducted.

6.4.3 Decrease of Production during Construction

There shall presumably be some decrease in production during the construction period. However, the decrease can be minimized by some means or another. In the study, an assumption is made that the decrease, if any, of production due to suspension of the production activities will be covered by sub-contracting and there will be no decrease in outputs throughout the year.

6.4.4 Sale Prices

Sale price varies greatly depending on the kind and/or grade of the products. In the study, sale prices are based on the current market situations of Indonesia and costs of production.

Table 6-11 summarizes the sale price to be applied in this study by classifying it into steel structure, plate work products and machine work products. The sale price is a net sale price excluding the value added tax. The sales revenue is the sum of the value of inventory in the previous year and the sales amount less the value of inventory at the end of the year.

Table 6-11 Unit Sale Price (1994)

(Unit: 1,000 Yen/T)

	Steel Structure		Plate Work		Machine Work	
	Heavy	Light	Heavy	Light	Heavy	Light
BARATA						
Surabaya				370	700	658
Gresik	526	271	653	494		
Jakarta	500	296	649	438		
Tegal		281		420	630	544
BBI						
Indra		255		443		715
Wahana		410	538	449		
BOMA STORK		300	650	521		664

6.4.5 Costs Elements

The production costs for each deisgnated company are listed in the attached Tables A-1-(1), A-1-(2), B-1-(1), B-1-(2), C-1-(1) and C-1-(2).

(1) Variable Costs

Variable costs consist of the raw and bought-out materials, consumables, utilities and other costs. Major cost elements are explained below.

1) Raw and bought-out materials

The raw materials consist chiefly of thick plates, thin plates, structural steels, piping materials and others, while bought-out materials consist of the machine parts, electrical/instrumental equipment and others. Three-month-stock is considered. Table 6-12 summarizes the unit raw and bought-out materials costs to be applied in this study.

Table 6-12 Unit Material Cost (1994)

(Unit: 1,000 Yen/T)

	Steel Structure		Plate Work		Machine Work	
	Heavy	Light	Heavy	Light	Heavy	Light
BARATA						
Surabaya				143	278	264
Gresik	138	155	292	164		
Jakarta	138	157	312	157		
Tegal		154		154	231	329
BBI						
Indra		157		200		255
Wahana		155	251	151		
BOMA STORK		150	245	149		252

2) Consumables

Consumables mainly consist of welding rods and lubricating oils.

3) Utilities

Utilities include electricity, water and fuel.

4) Others

Other variable costs consist of the costs for inside orders, sub-contracts, transportation jigs and tools, packing and painting less sale of scraps. Table 6-13 shows only the unit sub-contract cost to be applied in this study.

Table 6-13 Unit Sub-Contract Cost (1994)

(Unit: 1,000 Yen/T)

	Steel Structure		Plate Work		Machine Work	
	Heavy	Light	Heavy	Light	Heavy	Light
BARATA						
Surabaya				0	0	0
Gresik	0	40	0	54		
Jakarta	0	54	0	22		
Tegal		67		47	0	0
BBI						
Indra		48		0		0
Wahana		0	4	16		
BOMA STORK		50	23	18		0

(2) Fixed Costs

Fixed costs consist of costs for the direct labors, factory overhead, maintenance and repairs and insurance.

1) Wages for Direct Labors and Related Costs

Wages for the direct labors are calculated by multiplying the average labor cost per hour by the man-hours. Man-hours include the cost for welfare and fringe-benefit. The average man-hours cost for direct labor is 190 yen/hour. The man-hours requirement of disignated factories is calculated and summarized in Table 6-14.

Table 6-14 Man-hours Within Own Workshop

(Unit: Man-hours)

	1989	1994	1999
BARATA			
Surabaya	196,470	223,730	255,230
Gresik	1,071,980	1,071,980	1,071,980
Jakarta	687,380	687,380	687,380
Tegal	248,770	267,610	283,580
Total	2,204,600	2,250,700	2,298,170
BBI			
Indra	346,960	346,960	346,960
Wahana	625,290	625,290	625,290
Total	972,250	972,250	972,250
BOMA STORK	450,480	446,890	420,450

Table 6-15 shows the unit direct labor cost to be applied in the study.

Table 6-15 Unit Direct Labor Cost **(1994)**

(Unit: 1,000 Yen/T)

	Steel Structure		Plate Work		Machine Work	
	Heavy	Light	Heavy	Light	Heavy	Light
BARATA						
Surabaya				34	112	10
Gresik	10	7	15	6		
Jakarta	10	7	14	8		
Tegal		4		16	44	13
BBI						
Indra		4		7		9
Wahana		10	15	7		
BOMA STORK		0	20	6		7

2) Factory Overhead Costs

The factory overhead consists of salaries, wages and materials required for the indirect workers in factories such as engineers excluding for workers of marketing and administration. The miscellaneous fixed cost is also counted in this cost. The costs are calculated on an assumption that these correspond to the 100% of the direct labors cost, which is based on the information obtained in Indonesia.

3) Maintenance and Repairs Costs

The costs of maintenance and repairs consist of maintenance and repairs of buildings, facilities, machinery and replacement of tools. In this connection, the costs are calculated based on information obtained in Indonesia and experiences in Japan.

4) Insurance

The cost of insurance is estimated at 1% of book value.

5) Depreciation and Amortization

Method	:	Declining balance method
Buildings	:	5% per anjum at 0 salvage value
Machinery	:	10% per annum at 0 salvage value
Vehicle, Office equipment	:	50% per annum at 0 salvage value
Amortization	:	25% per annum at 0 salvage value
Re-imvestment for maintenance	:	12% per annum at 0 salvage value

(3) Marketing and Administration Expenses

Marketing and administration expenses are calculated with the basis that 50% of them are fixed and remaining 50% are in proportion to the sales of the products.

(4) Interest and Repayment

In the financial analysis, debt equity ratio to total project cost is 65% and 35% respectively. The loan of 65% is met by the long term loan. If the cash deposit runs short during the commercial operation period, the cash requirement shall be met by the short term loan. The terms and conditions for the loan are as follows:

(1) Long Term Loans

Interest rate : 10% per annum
Repayment period: 10 years
Installment : 10 times, once in every year
Grace period for repayment : 2 years after commissioning

(2) Short Term Lonas

Interest : 18% per annum
Repayment : Every year. Loans shall be obtained whenever necessity arises.

6.4.6 Tax

Corporate income taxes are set forth as follows according to the new tax system.

Up to 2.3 million yen : 15% of profit before tax
Up to 11.6 million yen : 25% of profit before tax
Over 11.6 million yen : 35% of profit before tax

6.4.7 Project Life

The project life shall be for 20 years as investment and commercial operation.

6.4.8 Others

Supplementary explanation on other items is listed below.

	BARATA	BBI	BOMA STORK
Product Inventory (Month)	0.16	fixed at 1,593.5MM¥	0.36
Raw Material Inventory (Month)	2.5	1.0	10.0
Consumable Inventory (Month)	2.0	3.0	1.0
Work in Process	12% of Raw Material + 12% of Direct Labor	10% of Raw Material + 10% of Direct Labor	fixed at 1,038.2 MM¥
Account Receivable (Month)	3.0	3.0	3.0
Account Payable (Month)	3.0	fixed at 1,899.5MM¥	3.0
Loss Carry Forward (Year)	5	5	5
Re-Investment for Vehicle, Office Supply, etc. (MM¥)	40	30	25
Training (MM¥) 1989	522.1	213.1	132.7
1990	275.6	154.8	31.7

6.5 Results of Financial Analysis

6.5.1 Summary on Internal Rate of Return

The results of the calculation on Financial Internal Rate of Return (FIRR) are shown in Tables 6-16 and 6-17.

Table 6-16 FIRR on Investment (1984 Constant Price Base)

(Unit: %)

	BARATA	B B I	BOMA STORK
Before Tax	15.5	15.3	35.5
After Tax	10.6	10.2	25.1

Table 6-17 FIRR on Equity After Tax (1984 Constant Price Base)

(Unit: %)

	BARATA	B B I	BOMA STORK
DER 65 : 35 Long Term Loan Interest Rate 10%	13.6	12.7	39.1
DER 50 : 50 Long Term Loan Interest Rate 10%	12.5	11.8	33.7
DER 65 : 35 Long Term Loan Interest Rate 5%	17.5	16.5	41.4

As shown in the tables above, the results of all FIRR show higher than 10%. This analysis is conducted using 1984 constant price base. Generally speaking, the project is often considered to be viable in case that the FIRR of constant price base shows higher than 10%.

6.5.2 Summary on Profit and Loss

The summary of income statement for each designated company is commented in the followings. The income statement is attached in the end of Chapter 6 in the form of computer output.

(1) BARATA

Even in the case of without development, the small profit from operation can be expected.
In the case of renovation, the loss will be arisen in 1989. The main reason is due to the large amount of interest to be paid for the renovation project. In 1990 onwards, the profit can be favorably expected.

(2) BBI

In the case of without development, the profit cannot be expected even if the production and sales of products can keep up at the same level.
In the case of development, the profit can be expected if the production and sales of products can be expected as scheduled.

(3) BOMA STORK

Even in the case of without development, the profit from operation can be expected to some extent.
In the case of development, the profit can be expected and the profitability will be in good condition. However, it should be noted that the loss (non operational loss) due to the change of foreign currency exchange should be carefully kept eyes open.

6.5.3 Major Financial Indicators

Major financial indicators are shown on Tables 6-18, 6-19 and 6-20. These indicators are calculated by the formula shown on the next page.

(a) Prorit Ratio to Sales (Before Tax)

= Profit Before Tax/Sales x 100

(b) Profit Ratio to Total Investment

= Profit Before Tax/Investment Total x 100

(c) Turnover Ratio Total Investment

= Sales/Investment Total

(d) Net Worth Ratio

= Total Capital/Total Liability & Capital

(e) Current Ratio

= Current Assets/Current Liabilities

(f) Sales Growth Ratio

= This Year Sales/Last Year Sales

(g) Profit Growth Ratio (After Tax)

= Profit After Tax/Last Year Profit After Tax

(h) Profit Growth Ratio (Before Tax)

= Profit Before Tax/Last Year Profit Before Tax

(i) Debt Ratio

= (PAT + DPR + Int. + A/P) - (A/R + Inventory + Reinvestment) / (Int. + Repayment)

PAT	:	Profit After Tax
DPR	:	Depreciation & Amortization
Int.	:	Interest on Long Term Loan & Interest on Short Term Loan
A/P	:	Increase in Account Payable
A/R	:	Increase in Account Receivable
Inventory	:	Increase in Inventory (Product, Half-finished Product, Raw-material & Consumable)
Repayment	:	Repayment on Long Term Loan & Repayment on Short Term Loan

Table 6-18 Major Financial Indicators (BARATA)

Year	Profit Ratio to Sales	Profit Ratio to Capital	Turnover Ratio to Capital	Net Worth Ratio	Current Ratio	Sales Growth Ratio	Profit Growth Ratio (B/T)	Profit Growth Ratio (A/T)	Debt Ratio
1989	-1.84	-0.01	0.48	0.28	1.69	6.01	-1.67	-2.53	0.64
1990	1.42	0.01	0.55	0.29	1.66	1.14	-0.88	-0.88	1.43
1991	6.78	0.04	0.59	0.32	1.83	1.07	5.11	3.37	1.20
1992	11.74	0.07	0.62	0.36	2.03	1.06	1.84	1.82	1.30
1993	15.89	0.11	0.66	0.42	2.26	1.06	1.44	1.44	1.41
1994	17.76	0.12	0.66	0.48	2.52	1.00	1.12	1.12	1.53
1995	19.79	0.13	0.66	0.55	2.78	1.00	1.11	1.11	1.59
1996	21.69	0.14	0.66	0.62	3.04	1.00	1.10	1.10	1.65
1997	23.46	0.16	0.66	0.69	3.31	1.00	1.08	1.08	1.74
1998	25.15	0.17	0.66	0.76	3.59	1.00	1.07	1.07	1.83
1999	27.93	0.19	0.69	0.82	3.86	1.05	1.17	1.17	1.96
2000	29.17	0.20	0.70	0.89	6.58	1.00	1.05	1.05	2.19
2001	30.59	0.21	0.70	0.90	7.69	1.00	1.05	1.05	-
2002	30.98	0.22	0.70	0.91	8.79	1.00	1.01	1.01	-
2003	31.32	0.22	0.70	0.92	9.88	1.00	1.01	1.01	-
2004	31.63	0.22	0.70	0.92	10.97	1.00	1.01	1.01	-

Table 6-19 Major Financial Indicators (BBI)

Year	Profit Ratio to Sales	Profit Ratio to Capital	Turnover Ratio to Capital	Net Worth Ratio	Current Ratio	Sales Growth Ratio	Profit Growth Ratio (B/T)	Profit Growth Ratio (A/T)	Debt Ratio
1989	-1.80	-0.01	0.48	0.25	1.34	4.37	-10.23	-13.68	0.29
1990	1.69	0.01	0.54	0.27	1.46	1.13	-1.06	-1.05	0.93
1991	7.93	0.05	0.57	0.31	1.67	1.06	4.98	3.29	1.11
1992	12.80	0.08	0.60	0.36	1.89	1.06	1.70	1.70	1.30
1993	16.63	0.11	0.64	0.42	2.15	1.05	1.37	1.37	1.41
1994	18.59	0.12	0.64	0.48	2.41	1.00	1.12	1.12	1.53
1995	20.61	0.13	0.64	0.55	2.67	1.00	1.11	1.11	1.59
1996	22.49	0.14	0.64	0.62	2.94	1.00	1.09	1.09	1.65
1997	24.26	0.15	0.64	0.69	3.22	1.00	1.08	1.08	1.73
1998	25.94	0.17	0.64	0.76	3.51	1.00	1.07	1.07	1.82
1999	27.54	0.18	0.64	0.83	3.80	1.00	1.06	1.06	1.93
2000	29.13	0.19	0.64	0.90	6.63	1.00	1.06	1.06	2.06
2001	30.66	0.20	0.64	0.91	7.77	1.00	1.05	1.05	-
2002	31.07	0.20	0.64	0.91	8.89	1.00	1.01	1.01	-
2003	31.43	0.20	0.64	0.92	10.01	1.00	1.01	1.01	-
2004	31.76	0.20	0.64	0.93	11.12	1.00	1.01	1.01	-

Table 6-20 Major Financial INDICATORS (BOMA STORK)

Year	Profit Ratio to Sales	Profit Ratio to Capital	Turnover Ratio to Capital	Net Worth Ratio	Current Ratio	Sales Growth Ratio	Profit Growth Ratio (B/T)	Profit Growth Ratio (A/T)	Debt Ratio
1989	22.49	0.34	1.51	0.28	1.31	3.43	10.87	10.65	-0.27
1990	23.45	0.38	1.60	0.40	1.80	1.06	1.10	1.10	0.83
1991	28.19	0.47	1.66	0.49	2.29	1.04	1.24	1.24	2.05
1992	31.23	0.54	1.72	0.55	2.72	1.03	1.15	1.15	3.85
1993	33.22	0.59	1.77	0.62	3.17	1.03	1.10	1.10	4.23
1994	34.14	0.61	1.77	0.67	3.66	1.00	1.03	1.03	4.50
1995	34.96	0.62	1.77	0.72	4.13	1.00	1.02	1.02	4.76
1996	35.71	0.63	1.77	0.76	4.60	1.00	1.02	1.02	5.07
1997	36.41	0.65	1.77	0.79	5.07	1.00	1.02	1.02	5.40
1998	37.08	0.66	1.77	0.82	5.55	1.00	1.02	1.02	5.91
1999	38.44	0.68	1.78	0.85	6.04	1.00	1.04	1.04	6.03
2000	39.06	0.69	1.78	0.88	7.31	1.00	1.02	1.02	6.41
2001	39.63	0.70	1.78	0.88	7.99	1.00	1.01	1.01	-
2002	39.79	0.71	1.78	0.89	8.66	1.00	1.00	1.00	-
2003	39.94	0.71	1.78	0.90	9.33	1.00	1.00	1.00	-
2004	40.06	0.71	1.78	0.91	10.00	1.00	1.00	1.00	-

(1) Debt Ratio (DR)

Debt ratio indicates the repayment capability of loans. The outcome is shown on the last column in Tables 6-18, 6-19 and 6-20. If DR is less than 1.0, the repayment of loans become unable and the bankruptcy will take place unless an additional financing or a rescheduling of replayment is realized. As observed in Tables 6-18, 6-19 and 6-20, DRs of BARATA, BBI and BOMA STORK show 0.64, 0.29 and -0,27 in 1989 respectively, however 1.43, 0.93 and 0.83 in 1990.

It is generally said that DR more than 1.5 seems to be sound and to be desirable if it becomes more than 2.0.

(2) Ratio of Turnover to Capital (Annual Sales Revenue to Capital Requirement)

The ratio of turnover to capital for the designated companies is summarized in column 4 of Tables 6-18, 6-19 and 6-20. The ratio of BARATA, BBI and BOMA STORK in 1994 is projected 0.66, 0.64 and 1.78 respectively.

The ratio is calculated according to the request of Indonesian counterpart. However, the evaluation using this ratio is not familiar in Japan. In addition, there is no construction of equipment manufacturing factories recently in Japan so that the above results can not be compared with Japanese instances. For reference, Table 6-21 summarizes the ratio in other industrial fields which is calculated using outputs in some Feasibility Studies conducted in Japan.

Table 6-21 Ratio of Turnover to Capital in Other Industries

Plant	Location	Ratio of Annual Sales Revenue to Investment Cost
Foundry	Indonesia (Medan)	0.30
Ethanol	Indonesia	0.82
Ethanol	Philippines	0.41
Oil Shale Cement	Thailand	0.40
Fertilizer	Zambia	0.71
Fertilizer	U.A.E.	0.60
Refinery	Guatemara	0.64

(3) Ratio of Capacity to Investment Cost

Table 6-22 summarizes the ratio of capacity to investment cost for each BABIBO factory. The capacity is indicated by the difference between with-development case and without-development case.

Table 6-22 Ratio of Capacity to Investment Cost

(Unit: T/Million Yen)

	Capacity/Investment Cost
BARATA	
Surabaya	0.38
Gresik	1.00
Jakarta	1.51
Tegal	1.57
BBI	
Indra	3.15
Wahana	0.91
BOMA STORK	5.56

This ratio is described according to the request of Indonesian counterpart. However, the ratio is considered inadequate to use in comparisson and evaluation of plant processing equipment manufacturing factories for the following reason:

The ratio is considered adequate to use in assessment of mass-production factories, chemical plants, etc. which manufacture uniform products, because the production capacities can be clearly specified. However, the plant processing equipment manufacturers make a variety of products. Although the capacity can be given in T/Y, the quantity in tonnage greatly differs depending on the production difficulties. The BABIBO's capacity is only exhibited based on the given Product Mix for each factory. If the factory is different, the Product Mix will be different; the capacity will differ with same investment, accordingly. For this reason the ratio fluctuates to great extent.

6.5.4 Sensitivity Analysis on FIRR

Sensitivity Analyses are carried out for the following parameters.

Change in Total Capital Requirement
Change in Sale Price of Products
Change in Raw Material Cost
Change of Equity
Change in Interest

(1) Change in Total Capital Requirement

As indicated in Tables 6-23, 6-24 and 6-25, the change in total capital requirement affects considerably the profitability of the project/ When the total capital requirement decreases by 20%, the increase of FIRR on I (After Tax) are as follows:

BARATA : 2.7%
BBI : 2.7%
BOMA STORK : 3.7%

(2) Change in Sale Price of Products

The effect exerted by the changes in sale price on profitability is studied by varying the prices of the products by plus and minus 20%. As indicated in Tables 6-23, 6-24 and 6-25, when sale prices of products increase by 20%, the increases of FIRR on I (After Tax) are as follows.

BARATA : 6.0%
BBI : 5.9%
BOMA STORK : 8.4%

(3) Change in Raw and Bought-out Material Cost

The effects exerted on the profitability is studied by varying the raw material cost by plus and minus 20%. As indicated in Tables 6-23, 6-24 and 6-25, when raw and bought-out material costs decrease by 20%, the increase of FIRR on I (After Tax) is as follows:

BARATA	:	2.9%
BBI	:	2.5%
BAMA STORK	:	4.7%

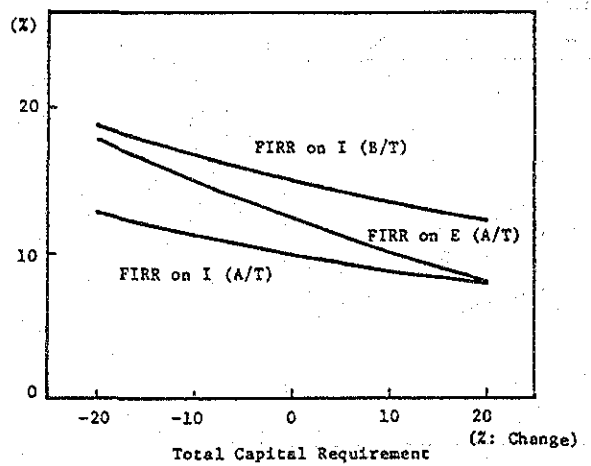
(4) Change of Equity

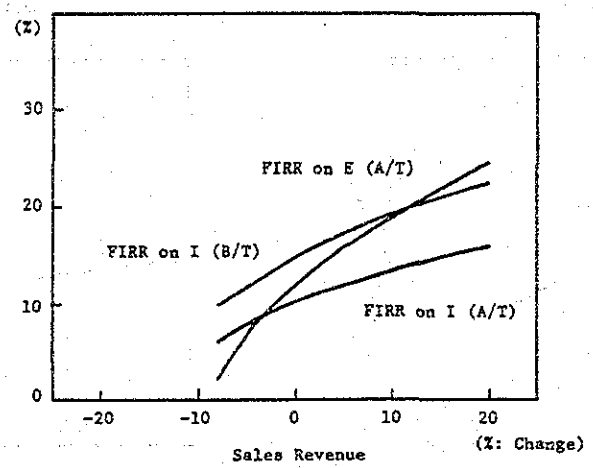
It is observed that these increase of equity shows the decrease of FIRR on E.

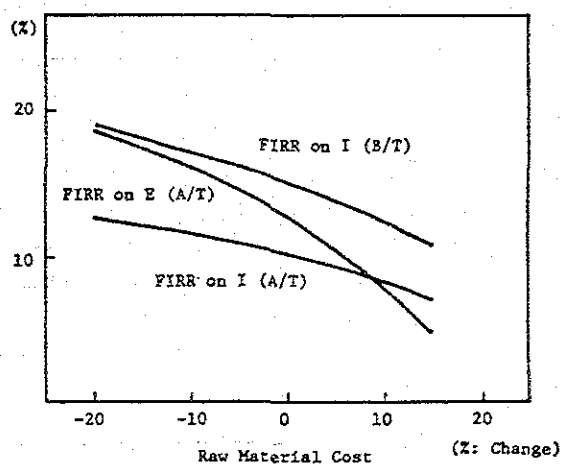
(5) Change in Interest rate

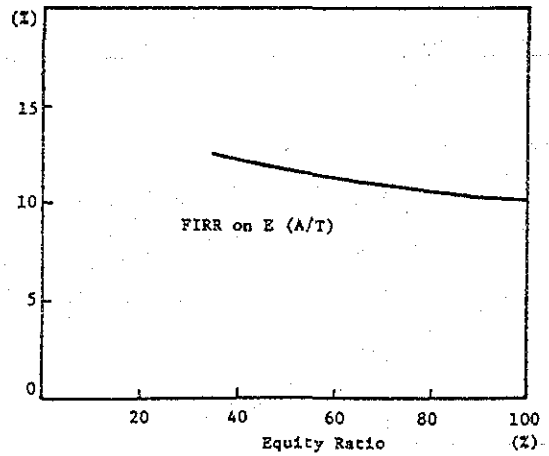
Tables 6-23, 6-24 and 6-25 show the effects of change in interest rate of FIRR on E for the designated companies. The change in interest rate affects the rate of FIRR on E considerably. Therefore in order to make this project better, it is important to borrow funds with a low interest rate.

Figure 6-1 Summary of Sensitivity Analysis (BARATA)









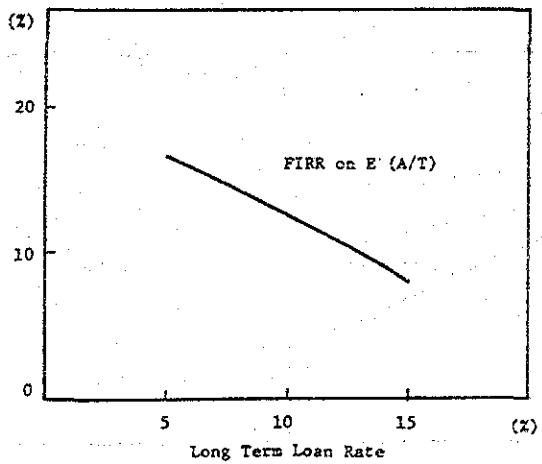


Figure 6-2 Summary of Sensitivity Analysis (BBI)

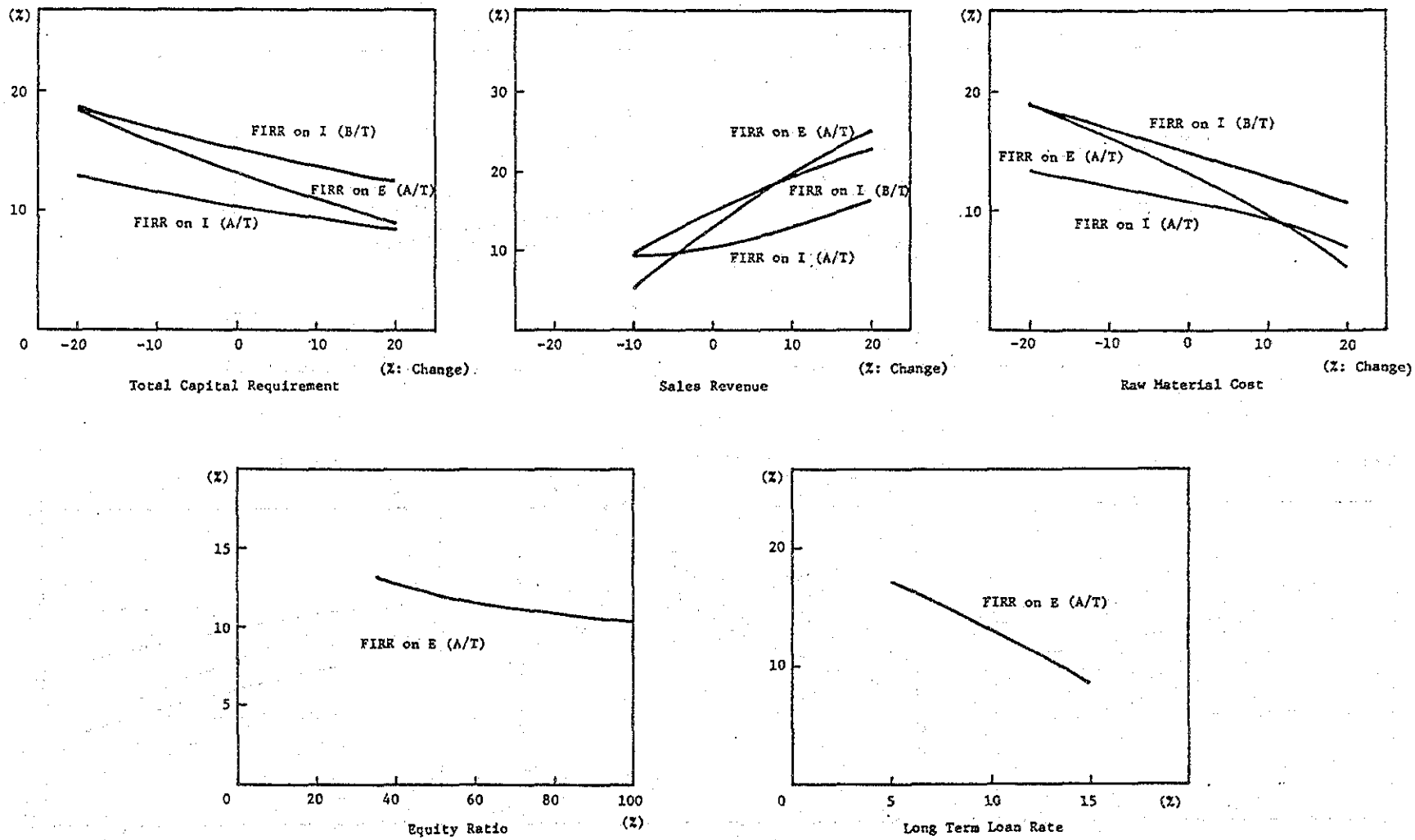


Figure 6-3 Summary of Sensitivity Analysis (BOMA-STORK)

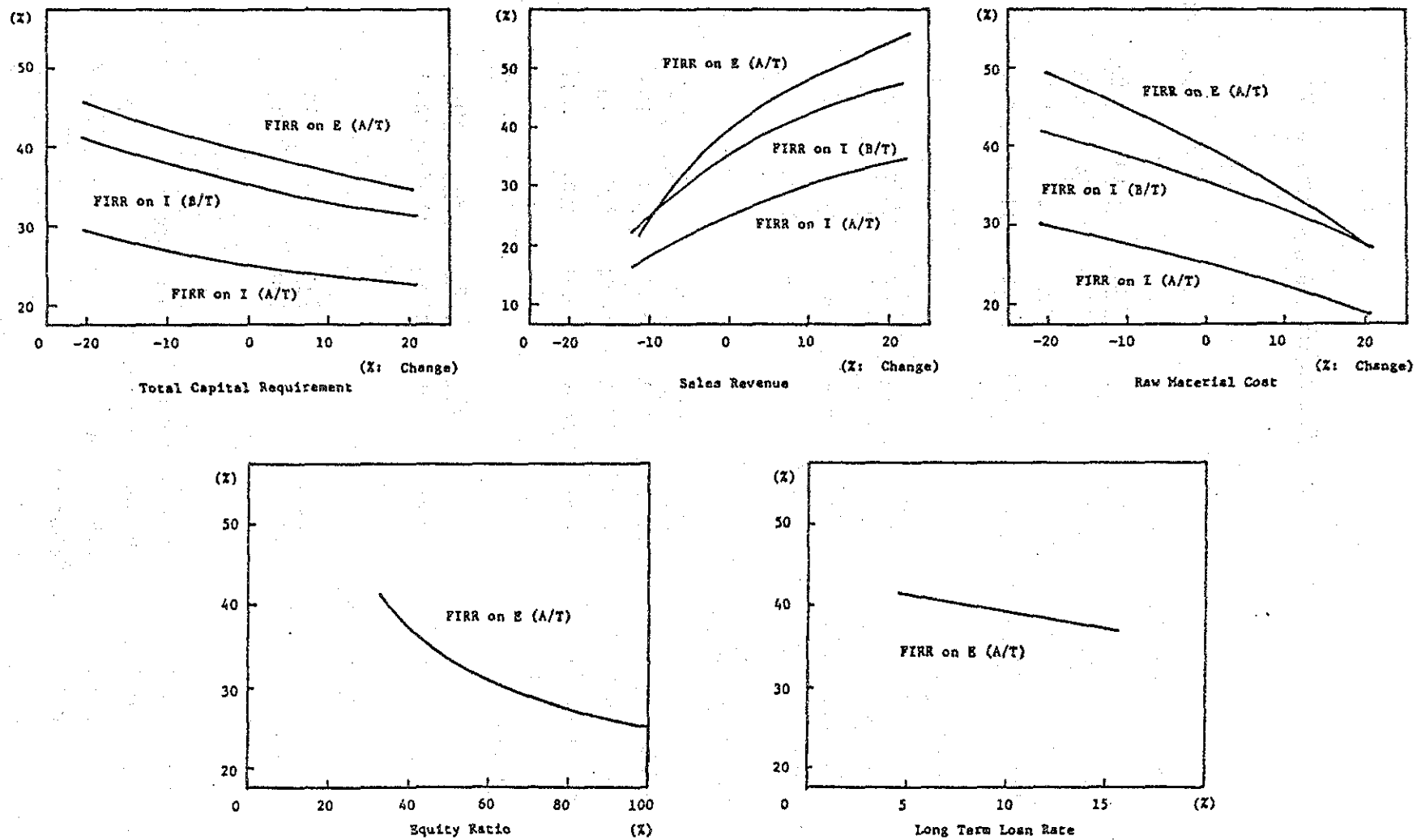


Table 6-23 Results of Sensitivity Analysis (BARATA)

(Unit: %)

Total Capital Requirement

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	19.02	17.11	15.47	14.04	12.78
FIRR on I (A/T)	13.34	11.88	10.63	9.54	8.57
FIRR on E (A/T)	18.90	16.09	13.61	11.37	9.35

Sales Revenue

	- 10	0	+ 10	+ 20
FIRR on I (B/T)	10.20	15.47	19.53	23.16
FIRR on I (A/T)	10.11	10.63	13.81	16.63
FIRR on E (A/T)	5.82	13.61	19.97	25.59

Raw Material Cost

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	19.22	17.39	15.47	13.42	11.06
FIRR on I (A/T)	13.50	12.17	10.63	9.23	7.11
FIRR on E (A/T)	19.67	16.73	13.61	10.01	5.98

Equity Ratio

	35	50	65	80	100
FIRR on E (A/T)	13.61	12.46	11.70	11.16	10.63

Long/Term Loan Rate

	5	10	15
FIRR on E (A/T)	17.50	13.61	8.94

Notes) FIRR : Financial Internal Rate of Return
FIRR on I : FIRR on Investment
FIRR on E : FIRR on Equity
B/T : Before tax
A/T : After tax

Table 6-24 Results of Sensitivity Analysis (BBI)

(Unit: %)

Total Capital Requirement

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	18.89	16.95	15.29	13.85	12.57
FIRR on I (A/T)	12.92	11.47	10.23	9.14	8.17
FIRR on E (A/T)	17.88	15.12	12.69	10.49	8.46

Sales Revenue

	- 8	- 5	0	+ 10	+ 20
FIRR on I (B/T)	10.16	12.16	15.29	19.29	22.76
FIRR on I (A/T)	6.33	8.45	10.23	13.35	16.09
FIRR on E (A/T)	2.11	7.39	12.69	19.14	24.59

Raw Material Cost

	- 20	- 10	0	+ 10	+ 15
FIRR on I (B/T)	19.00	17.20	15.29	12.45	10.97
FIRR on I (A/T)	12.70	11.75	10.23	8.36	7.22
FIRR on E (A/T)	18.76	16.01	12.69	7.88	4.73

Equity Ratio

	35	50	65	80	100
FIRR on E (A/T)	12.69	11.75	11.12	10.67	10.23

Long/Term Loan Rate

	5	10	15
FIRR on E (A/T)	16.52	12.69	8.01

Notes) FIRR : Financial Internal Rate of Return
FIRR on I : FIRR on Investment
FIRR on E : FIRR on Equity
B/T : Before tax
A/T : After tax

Table 6-25 Results of Sensitivity Analysis (BOMA STORK)

(Unit: %)

Investment Cost

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	40.98	38.04	35.54	33.37	31.47
FIRR on I (A/T)	28.82	26.83	25.11	23.60	22.27
FIRR on E (A/T)	45.16	41.94	39.13	36.64	34.41

Sales Revenue

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	-	24.97	35.54	41.57	47.04
FIRR on I (A/T)	-	17.36	25.11	29.55	33.53
FIRR on E (A/T)	-	24.54	39.13	47.40	54.43

Raw Material Cost

	- 20	- 10	0	+ 10	+ 20
FIRR on I (B/T)	41.67	38.81	35.54	32.37	27.70
FIRR on I (A/T)	29.83	27.59	25.11	22.14	19.09
FIRR on E (A/T)	48.69	44.38	39.13	33.28	27.17

Equity Ratio

	35	50	65	80	100
FIRR on E (A/T)	39.13	33.68	30.13	27.59	25.11

Long/Term Loan Rate

	5	10	15
FIRR on E (A/T)	41.41	39.13	36.43

Notes) FIRR : Financial Internal Rate of Return
FIRR on I : FIRR on Investment
FIRR on E : FIRR on Equity
B/T : Before tax
A/T : After tax

Table A-1-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	195	195	195	195	195	1432	1618	1730	1843	1954
Raw Material Purchaced	934	934	934	934	8112	7951	8415	8957	9492	9380
Final Raw Material Inventory	195	195	195	195	1432	1618	1730	1843	1954	1954
Raw Material Consumed	934	934	934	934	6874	7765	8303	8844	9380	9380
Consumable Cost										
Initial Consumanble Inventory	8	8	8	8	8	51	57	60	64	67
Consumable Purchaced	47	47	47	47	346	349	365	387	408	404
Final Consumable Inventory	8	8	8	8	51	57	60	64	67	67
Consumable Consumed	47	47	47	47	303	342	362	383	404	404
Utilities	63	63	63	63	207	207	207	207	207	207
Others	501	501	501	501	1094	1213	1274	1336	1397	1397
Sub-Total	1545	1545	1545	1545	8478	9527	10146	10770	11388	11388
Fixed Cost										
Direct Labor	247	247	247	247	419	422	425	428	428	428
Factory Overhead Cost	247	247	247	247	419	422	425	428	428	428
Maintenance & Repair	30	30	30	30	266	287	309	330	350	368
Insurance	2	2	3	3	294	272	248	227	208	191
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	526	526	527	527	1398	1403	1407	1413	1414	1415
Depreciation	24	26	28	30	2562	2357	2143	1949	1774	1616
Amortization	0	0	0	0	1050	788	591	443	332	249
Work in Process										
Initial Work in Process	147	147	147	147	147	912	1023	1091	1159	1225
Final Work in Process	147	147	147	147	912	1023	1091	1159	1225	1225
Production Cost	2095	2098	2100	2101	12725	13962	14220	14508	14842	14668

Table A-1-(2) BARATA

*** BABIRO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	1954	1954	1954	1954	1954	2056	2056	2056	2056	2056
Raw Material Purchaced	9380	9380	9380	9380	9970	9868	9868	9868	9868	9868
Final Raw Material Inventory	1954	1954	1954	1954	2056	2056	2056	2056	2056	2056
Raw Material Consumed	9380	9380	9380	9380	9868	9868	9868	9868	9868	9868
Consumable Cost										
Initial Consumable Inventory	67	67	67	67	67	68	68	68	68	68
Consumable Purchaced	404	404	404	404	411	410	410	410	410	410
Final Consumable Inventory	67	67	67	67	68	68	68	68	68	68
Consumable Consumed	404	404	404	404	410	410	410	410	410	410
Utilities	207	207	207	207	207	207	207	207	207	207
Others	1397	1397	1397	1397	1394	1394	1394	1394	1394	1394
Sub-Total	11388	11388	11388	11388	11879	11879	11879	11879	11879	11879
Fixed Cost										
Direct Labor	428	428	428	428	437	437	437	437	437	437
Factory Overhead Cost	428	428	428	428	437	437	437	437	437	437
Maintenance & Repair	374	380	386	392	410	410	410	410	410	410
Insurance	175	161	148	136	125	115	106	98	91	84
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	1405	1397	1390	1384	1409	1399	1390	1382	1375	1368
Depreciation	1473	1344	1226	1120	1024	937	858	787	722	663
Amortization	187	140	105	79	59	44	33	25	19	14
Work in Process										
Initial Work in Process	1225	1225	1225	1225	1225	1286	1286	1286	1286	1286
Final Work in Process	1225	1225	1225	1225	1286	1286	1286	1286	1286	1286
Production Cost	14453	14269	14109	13971	14311	14260	14161	14073	13995	13924

Table A-2 BARATA

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	2627	2627	2627	2627	15796	17998	19255	20501	21737	21754
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	2627	2627	2627	2627	15796	17998	19255	20501	21737	21754
Costs & Expenses										
Cost of Goods Sold	2095	2098	2100	2101	12583	13946	14216	14504	14838	14671
Initial Product Inventory	28	28	28	28	28	170	186	190	193	198
Production Cost	2095	2098	2100	2101	12725	13962	14220	14508	14842	14668
Final Product Inventory	28	28	28	28	170	186	190	193	198	196
Selling Expenses	93	93	93	93	326	365	387	409	431	432
General Administ. Expense	258	258	258	258	905	1013	1074	1136	1196	1197
Interest on Long Term Loan	0	0	0	0	2273	2273	2273	2046	1818	1591
Interest on Short Term Loan	0	0	0	0	0	146	0	0	0	0
Sub-Total	2446	2449	2451	2452	16087	17743	17950	18095	18283	17891
Income Before Income Tax	181	179	176	175	-291	255	1305	2406	3454	3863
Income Tax	62	61	60	60	0	0	443	841	1208	1351
Income After Income Tax	119	117	116	115	-291	255	862	1565	2247	2513

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	21754	21754	21754	21754	22843	22857	22857	22857	22857	22857
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	21754	21754	21754	21754	22843	22857	22857	22857	22857	22857
Costs & Expenses										
Cost of Goods Sold	14456	14271	14112	13973	14307	14261	14162	14074	13996	13925
Initial Product Inventory	196	193	190	188	186	191	190	189	188	187
Production Cost	14453	14269	14109	13971	14311	14260	14161	14073	13995	13924
Final Product Inventory	193	190	188	186	191	190	189	188	187	186
Selling Expenses	432	432	432	432	451	451	451	451	451	451
General Administ. Expense	1197	1197	1197	1197	1251	1251	1251	1251	1251	1251
Interest on Long Term Loan	1364	1136	909	682	455	227	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	17449	17037	16650	16284	16463	16190	15864	15776	15698	15627
Income Before Income Tax	4305	4717	5104	5470	6380	6667	6993	7081	7159	7230
Income Tax	1505	1650	1785	1913	2232	2332	2446	2477	2504	2529
Income After Income Tax	2800	3068	3319	3557	4148	4335	4547	4604	4655	4701

Table A-3-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sources of Funds										
Profit Before Tax	181	179	176	175	-291	255	1305	2406	3454	3863
Depreciation	24	26	28	30	2562	2357	2143	1949	1774	1616
Amortization	0	0	0	0	1050	788	591	443	332	249
Share Capital	243	1526	5741	2642	0	0	0	0	0	0
Long Term Debt	495	3166	12095	6973	0	0	0	0	0	0
Short Term Debt	0	0	0	0	810	0	0	0	0	0
Increase in Account Payable	-3	0	0	0	1869	-40	120	141	139	-29
Sub-total	940	4896	18041	9819	6000	3361	4159	4939	5700	5700
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	733	4399	16377	7331	522	276	40	40	40	40
Pre-Operation Expenses	0	0	67	258	0	0	0	0	0	0
Interest during Construction	45	333	1432	2066	0	0	0	0	0	0
Increase in Account Reclevable	0	0	0	0	3292	551	314	312	309	4
Raw Mterial & Cons. Inventory	0	0	0	0	1280	192	115	116	115	0
Half Finished Product Inventory	0	0	0	0	764	112	67	68	67	0
Product Inventory	0	0	0	0	142	17	3	4	4	-2
Repayment on Long Term Loan	0	0	0	0	0	0	2273	2273	2273	2273
Repayment on Short Term Loan	0	0	0	0	0	810	0	0	0	0
Income Tax Payment	62	61	60	60	0	0	443	841	1208	1351
Dividends Payment	24	23	23	23	0	51	172	313	449	503
Sub-total	864	4816	17960	9738	6000	2008	3429	3966	4465	4168
Cash Generation	76	80	81	82	0	1353	730	973	1235	1532
Cum. Cash	654	734	815	897	897	2250	2980	3953	5188	6720

Table A-3-(2) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sources of Funds										
Profit Before Tax	4305	4717	5104	5470	6380	6667	6993	7081	7159	7230
Depreciation	1473	1344	1226	1120	1024	937	858	787	722	663
Amortization	187	140	105	79	59	44	33	25	19	14
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	0	0	0	0	0	0	0	0	0	0
Increase in Account Payable	0	0	0	0	149	-26	0	0	0	0
Sub-total	5965	6201	6436	6669	7612	7623	7884	7893	7900	7907
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	40	40	40	40	40	40	40	40	40	40
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	272	4	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	103	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	60	0	0	0	0	0
Product Inventory	-3	-2	-2	-2	5	-1	-1	-1	-1	-1
Repayment on Long Term Loan	2273	2273	2273	2273	2273	2273	0	0	0	0
Repayment on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Income Tax Payment	1505	1650	1785	1913	2232	2332	2446	2477	2504	2529
Dividends Payment	560	614	664	711	830	867	909	921	931	940
Sub-total	4375	4574	4760	4936	5814	5515	3394	3437	3474	3508
Cash Generation	1590	1628	1676	1734	1799	2108	4490	4456	4426	4399
Cum. Cash	8309	9937	11613	13347	15145	17254	21744	26200	30626	35025

Table A-4-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
--------- BALANCE SHEET ---------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Asset										
Cash on Hand & In Bank	679	759	840	922	922	2275	3005	3979	5213	6745
Trade Account & Note Receivable	657	657	657	657	3949	4500	4814	5125	5434	5439
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	28	28	28	28	170	186	190	193	198	196
Raw Material & Cons. Inventory	202	202	202	202	1483	1675	1790	1906	2022	2022
Work In Process	147	147	147	147	912	1023	1091	1159	1225	1225
Inventory Total	378	378	378	378	2564	2884	3071	3258	3445	3443
Total Current Assets	1714	1794	1875	1957	7435	9659	10890	12362	14092	15626
Fixed Asset										
Investment	1007	5366	21703	28994	28994	28994	28994	28994	28994	28994
Investment for Maintenance	80	120	160	200	722	998	1038	1078	1118	1158
Accumulated Depreciation	194	220	248	278	2840	5197	7340	9290	11064	12680
Book Value	893	5266	21615	28916	26876	24794	22691	20782	19048	17471
Intangible Assets										
Value	45	378	1877	4201	4201	4201	4201	4201	4201	4201
Accumulated Amortization	0	0	0	0	1050	1838	2429	2872	3204	3453
Book Value	45	378	1877	4201	3151	2363	1772	1329	997	748
Other Assets	6	6	6	6	6	6	6	6	6	6
Total Fixed Assets	944	5649	23497	33122	30032	27163	24469	22117	20050	18225
TOTAL ASSETS	2658	7443	25372	35079	37467	36822	35359	34479	34142	33851
Current Liabilities										
Trade Account & Notes Payable	245	245	245	245	2114	2075	2195	2336	2475	2446
S/T Bank Loan	0	0	0	0	810	0	0	0	0	0
Current Portion of L/T Loan	0	0	0	0	0	2273	2273	2273	2273	2273
Other Current Liabilities	1474	1474	1474	1474	1474	1474	1474	1474	1474	1474
Total Current Liabilities	1720	1720	1720	1720	4398	5822	5942	6083	6222	6193
Long-Term Liabilities										
Long-Term Debt	495	3661	15756	22729	22729	20456	18183	15911	13638	11365
Stockholders Equity										
Capital	243	1768	7509	10151	10151	10151	10151	10151	10151	10151
Retained Earning	200	294	387	479	188	392	1081	2334	4131	6141
Total	442	2062	7896	10630	10339	10543	11233	12485	14283	16293
TOTAL LIABILITY & EQUITY	2657	7443	25372	35079	37467	36822	35359	34479	34142	33851

Table A-4-(2) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ----------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current Asset										
Cash on Hand & in Bank	8335	9962	11639	13372	15171	17279	21769	26226	30652	35051
Trade Account & Note Receivable	5439	5439	5439	5439	5711	5714	5714	5714	5714	5714
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	193	190	188	186	191	190	189	188	187	186
Raw Material & Cons. Inventory	2022	2022	2022	2022	2124	2124	2124	2124	2124	2124
Work in Process	1225	1225	1225	1225	1286	1286	1286	1286	1286	1286
Inventory Total	3440	3437	3435	3433	3601	3600	3599	3598	3597	3596
Total Current Assets	17213	18838	20512	22244	24482	26593	31083	35538	39963	44361
Fixed Asset										
Investment	28994	28994	28994	28994	28994	28994	28994	28994	28994	28994
Investment for Maintenance	1198	1238	1278	1318	1358	1398	1438	1478	1518	1558
Accumulated Depreciation	14153	15497	16724	17844	18868	19806	20664	21451	22173	22837
Book Value	16038	14735	13548	12468	11483	10586	9768	9021	8338	7715
Intangible Assets										
Value	4201	4201	4201	4201	4201	4201	4201	4201	4201	4201
Accumulated Amortization	3640	3780	3886	3964	4024	4068	4101	4126	4145	4159
Book Value	561	421	315	237	177	133	100	75	56	42
Other Assets	6	6	6	6	6	6	6	6	6	6
Total Fixed Assets	16605	15161	13869	12710	11666	10725	9873	9101	8400	7763
TOTAL ASSETS	33818	33999	34381	34954	36149	37318	40955	44639	48363	52123
Current Liabilities										
Trade Account & Notes Payable	2446	2446	2446	2446	2595	2570	2570	2570	2570	2570
S/T Bank Loan	0	0	0	0	0	0	0	0	0	0
Current Portion of L/T Loan	2273	2273	2273	2273	2273	0	0	0	0	0
Other Current Liabilities	1474	1474	1474	1474	1474	1474	1474	1474	1474	1474
Total Current Liabilities	6193	6193	6193	6193	6342	4044	4044	4044	4044	4044
Long-Term Liabilities										
Long-Term Debt	9092	6819	4546	2273	0	0	0	0	0	0
Stockholders Equity										
Capital	10151	10151	10151	10151	10151	10151	10151	10151	10151	10151
Retained Earning	8381	10835	13491	16336	19655	23123	26760	30443	34167	37928
Total	18532	20987	23642	26488	29806	33274	36911	40595	44319	48079
TOTAL LIABILITY & EQUITY	33817	33999	34381	34954	36149	37318	40955	44638	48363	52123

Table A-5-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	195	195	195	195	195	195	195	195	195	195
Raw Material Purchaced	934	934	934	934	934	934	934	934	934	934
Final Raw Material Inventory	195	195	195	195	195	195	195	195	195	195
Raw Material Consumed	934	934	934	934	934	934	934	934	934	934
Consumable Cost										
Initial Consumable Inventory	8	8	8	8	8	8	8	8	8	8
Consumable Purchaced	47	47	47	47	47	47	47	47	47	47
Final Consumable Inventory	8	8	8	8	8	8	8	8	8	8
Consumable Consumed	47	47	47	47	47	47	47	47	47	47
Utilities	63	63	63	63	63	63	63	63	63	63
Others	501	501	501	501	501	501	501	501	501	501
Sub-Total	1545	1545	1545	1545	1545	1545	1545	1545	1545	1545
Fixed Cost										
Direct Labor	247	247	247	247	247	247	247	247	247	247
Factory Overhead Cost	247	247	247	247	247	247	247	247	247	247
Maintenance & Repair	30	30	30	30	30	30	30	30	30	30
Insurance	2	2	3	3	3	3	3	3	3	3
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	526	526	527	527	527	527	527	527	527	527
Depreciation	24	26	28	30	32	34	35	36	38	39
Amortization	0	0	0	0	0	0	0	0	0	0
Work in Process										
Initial Work in Process	147	147	147	147	147	147	147	147	147	147
Final Work in Process	147	147	147	147	147	147	147	147	147	147
Production Cost	2095	2098	2100	2101	2104	2106	2107	2109	2110	2112

Table A-5-(2) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
--- *PRODUCTION COST ACCOUNTING* ---
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	195	195	195	195	195	195	195	195	195	195
Raw Material Purchaced	934	934	934	934	934	934	934	934	934	934
Final Raw Material Inventory	195	195	195	195	195	195	195	195	195	195
Raw Material Consumed	934	934	934	934	934	934	934	934	934	934
Consumable Cost										
Initial Consumanble Inventory	8	8	8	8	8	8	8	8	8	8
Consumable Purchaced	47	47	47	47	47	47	47	47	47	47
Final Consumable Inventory	8	8	8	8	8	8	8	8	8	8
Consumable Consumed	47	47	47	47	47	47	47	47	47	47
Utilities	63	63	63	63	63	63	63	63	63	63
Others	501	501	501	501	501	501	501	501	501	501
Sub-Total	1545	1545	1545	1545	1545	1545	1545	1545	1545	1545
Fixed Cost										
Direct Labor	247	247	247	247	247	247	247	247	247	247
Factory Overhead Cost	247	247	247	247	247	247	247	247	247	247
Maintenance & Repair	30	30	30	30	30	30	30	30	30	30
Insurance	3	4	4	4	4	4	4	4	4	4
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	527	528	528	528	528	528	528	528	528	528
Depreciation	41	42	43	44	45	47	48	49	49	50
Amortization	0	0	0	0	0	0	0	0	0	0
Work in Process										
Initial Work in Process	147	147	147	147	147	147	147	147	147	147
Final Work in Process	147	147	147	147	147	147	147	147	147	147
Production Cost	2113	2114	2116	2117	2118	2119	2121	2122	2123	2123

Table A-6 BARATA

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Costs & Expenses										
Cost of Goods Sold	2095	2098	2100	2101	2104	2105	2107	2109	2110	2112
Initial Product Inventory	28	28	28	28	28	28	28	28	28	28
Production Cost	2095	2098	2100	2101	2104	2106	2107	2109	2110	2112
Final Product Inventory	28	28	28	28	28	28	28	28	28	28
Selling Expenses	93	93	93	93	93	93	93	93	93	93
General Administ. Expense	258	258	258	258	258	258	258	258	258	258
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	2446	2449	2451	2452	2455	2456	2458	2460	2461	2463
Income Before Income Tax	181	179	176	175	172	171	169	167	166	164
Income Tax	62	61	60	60	59	58	58	57	57	56
Income After Income Tax	119	117	116	115	113	112	111	110	109	108

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	2627	2627	2627	2627	2627	2627	2627	2627	2627	2627
Costs & Expenses										
Cost of Goods Sold	2113	2114	2116	2117	2118	2119	2121	2122	2123	2123
Initial Product Inventory	28	28	28	28	28	28	28	28	28	28
Production Cost	2113	2114	2116	2117	2118	2119	2121	2122	2123	2123
Final Product Inventory	28	28	28	28	28	28	28	28	28	28
Selling Expenses	93	93	93	93	93	93	93	93	93	93
General Administ. Expense	258	258	258	258	258	258	258	258	258	258
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	2464	2465	2467	2468	2469	2470	2472	2473	2474	2474
Income Before Income Tax	163	162	160	159	158	157	155	154	153	153
Income Tax	56	55	55	54	54	53	53	53	52	52
Income After Income Tax	107	106	106	105	104	103	102	102	101	101

Table A-7-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sources of Funds										
Profit Before Tax	181	179	176	175	172	171	169	167	166	164
Depreciation	24	26	28	30	32	34	35	36	38	39
Amortization	0	0	0	0	0	0	0	0	0	0
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	0	0	0	0	0	0	0	0	0	0
Increase in Account Payable	-3	0	0	0	0	0	0	0	0	0
Sub-total	202	205	204	204	204	204	204	204	204	204
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	40	40	40	40	45	45	45	45	45	50
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	0	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	0	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Repayment on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Income Tax Payment	62	61	60	60	59	58	58	57	57	56
Dividends Payment	24	23	23	23	23	22	22	22	22	22
Sub-total	126	125	124	123	127	126	125	124	124	128
Cash Generation	76	80	81	82	78	78	79	80	80	76
Cum. Cash	654	734	815	897	974	1052	1131	1211	1291	1367

Table A-7-(2) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sources of Funds										
Profit Before Tax	163	162	160	159	158	157	155	154	153	153
Depreciation	41	42	43	44	45	47	48	49	49	50
Amortization	0	0	0	0	0	0	0	0	0	0
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	0	0	0	0	0	0	0	0	0	0
Increase in Account Payable	0	0	0	0	0	0	0	0	0	0
Sub-total	204	203	203	203	203	203	203	203	203	203
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	50	50	50	50	55	55	55	55	55	55
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	0	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	0	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Repayment on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Income Tax Payment	56	55	55	54	54	53	53	53	52	52
Dividends Payment	21	21	21	21	21	21	20	20	20	20
Sub-total	127	126	126	125	130	129	128	128	128	127
Cash Generation	76	77	77	78	73	74	75	75	75	76
Cum. Cash	1443	1520	1598	1676	1749	1823	1898	1973	2048	2124

Table A-8-(1) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ----------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BARATA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Asset										
Cash on Hand & In Bank	679	759	840	922	1000	1078	1157	1236	1317	1392
Trade Account & Note Receivable	657	657	657	657	657	657	657	657	657	657
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	28	28	28	28	28	28	28	28	28	28
Raw Material & Cons. Inventory	202	202	202	202	202	202	202	202	202	202
Work in Process	147	147	147	147	147	147	147	147	147	147
Inventory Total	378	378	378	378	378	378	378	378	378	378
Total Current Assets	1714	1794	1875	1957	2034	2112	2191	2271	2351	2427
Fixed Asset										
Investment	314	314	314	314	314	314	314	314	314	314
Investment for Maintenance	80	120	160	200	245	290	335	380	425	475
Accumulated Depreciation	194	220	248	278	310	343	379	415	453	492
Book Value	200	214	226	236	249	261	271	279	287	297
Intangible Assets										
Value	0	0	0	0	0	0	0	0	0	0
Accumulated Amortization	0	0	0	0	0	0	0	0	0	0
Book Value	0	0	0	0	0	0	0	0	0	0
Other Assets	6	6	6	6	6	6	6	6	6	6
Total Fixed Assets	206	220	231	242	255	266	276	285	292	303
TOTAL ASSETS	1920	2014	2106	2198	2289	2379	2468	2556	2643	2730
Current Liabilities										
Trade Account & Notes Payable	245	245	245	245	245	245	245	245	245	245
S/T Bank Loan	0	0	0	0	0	0	0	0	0	0
Current Portion of L/T Loan	0	0	0	0	0	0	0	0	0	0
Other Current Liabilities	1474	1474	1474	1474	1474	1474	1474	1474	1474	1474
Total Current Liabilities	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Long-Term Liabilities										
Long-Term Debt	0	0	0	0	0	0	0	0	0	0
Stockholders Equity										
Capital	0	0	0	0	0	0	0	0	0	0
Retained Earning	200	294	387	479	569	659	748	836	924	1010
Total	200	294	387	479	569	659	748	836	924	1010
TOTAL LIABILITY & EQUITY	1919	2013	2106	2198	2289	2379	2468	2556	2643	2730

Table A-8-(2) BARATA

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ---------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BARATA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current Asset										
Cash on Hand & in Bank	1469	1546	1623	1701	1775	1849	1923	1998	2073	2149
Trade Account & Note Receivable	657	657	657	657	657	657	657	657	657	657
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	28	28	28	28	28	28	28	28	28	28
Raw Material & Cons. Inventory	202	202	202	202	202	202	202	202	202	202
Work in Process	147	147	147	147	147	147	147	147	147	147
Inventory Total	378	378	378	378	378	378	378	378	378	378
Total Current Assets	2504	2581	2658	2736	2809	2883	2958	3033	3108	3184
Fixed Asset										
Investment	314	314	314	314	314	314	314	314	314	314
Investment for Maintenance	525	575	625	675	730	785	840	895	950	1005
Accumulated Depreciation	532	574	617	661	706	753	801	849	898	949
Book Value	307	315	322	328	338	346	354	360	366	371
Intangible Assets										
Value	0	0	0	0	0	0	0	0	0	0
Accumulated Amortization	0	0	0	0	0	0	0	0	0	0
Book Value	0	0	0	0	0	0	0	0	0	0
Other Assets	6	6	6	6	6	6	6	6	6	6
Total Fixed Assets	312	320	327	334	343	352	359	366	371	376
TOTAL ASSETS	2816	2901	2986	3070	3153	3235	3317	3399	3480	3560
Current Liabilities										
Trade Account & Notes Payable	245	245	245	245	245	245	245	245	245	245
S/T Bank Loan	0	0	0	0	0	0	0	0	0	0
Current Portion of L/T Loan	0	0	0	0	0	0	0	0	0	0
Other Current Liabilities	1474	1474	1474	1474	1474	1474	1474	1474	1474	1474
Total Current Liabilities	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Long-Term Liabilities										
Long-Term Debt	0	0	0	0	0	0	0	0	0	0
Stockholders Equity										
Capital	0	0	0	0	0	0	0	0	0	0
Retained Earning	1096	1181	1266	1350	1433	1516	1597	1679	1760	1840
Total	1096	1181	1266	1350	1433	1516	1597	1679	1760	1840
TOTAL LIABILITY & EQUITY	2816	2901	2985	3069	3153	3235	3317	3399	3479	3560

Table B-1-(1) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	62	62	62	62	62	296	335	355	374	394
Raw Material Purchaced	747	747	747	747	3780	4059	4276	4513	4749	4729
Final Raw Material Inventory	62	62	62	62	296	335	355	374	394	394
Raw Material Consumed	747	747	747	747	3547	4020	4256	4493	4729	4729
Consumable Cost										
Initial Consumanble Inventory	11	11	11	11	11	44	50	53	56	59
Consumable Purchaced	45	45	45	45	210	207	216	228	239	236
Final Consumable Inventory	11	11	11	11	44	50	53	56	59	59
Consumable Consumed	45	45	45	45	177	201	213	225	236	236
Utilities	23	23	23	23	80	80	80	80	80	80
Others	350	350	350	350	691	782	827	872	918	918
Sub-Total	1165	1165	1165	1165	4495	5083	5376	5670	5963	5963
Fixed Cost										
Direct Labor	168	168	168	168	180	180	180	180	180	180
Factory Overhead Cost	168	168	168	168	180	180	180	180	180	180
Maintenance & Repair	14	14	14	14	89	94	99	104	109	114
Insurance	1	1	1	2	154	143	131	121	111	102
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	351	351	351	352	603	597	590	585	580	576
Depreciation	15	16	17	18	1293	1194	1089	995	909	831
Amortization	5	4	3	2	478	358	269	202	151	113
Work in Process										
Initial Work in Process	96	96	96	96	96	390	440	465	490	515
Final Work in Process	96	96	96	96	390	440	465	490	515	515
Production Cost	1536	1536	1536	1537	6575	7183	7300	7426	7578	7483

Table B-1-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	394	394	394	394	394	394	394	394	394	394
Raw Material Purchaced	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729
Final Raw Material Inventory	394	394	394	394	394	394	394	394	394	394
Raw Material Consumed	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729
Consumable Cost										
Initial Consumanble Inventory	59	59	59	59	59	59	59	59	59	59
Consumable Purchaced	236	236	236	236	236	236	236	236	236	236
Final Consumable Inventory	59	59	59	59	59	59	59	59	59	59
Consumable Consumed	236	236	236	236	236	236	236	236	236	236
Utilities	80	80	80	80	80	80	80	80	80	80
Others	918	918	918	918	918	918	918	918	918	918
Sub-Total	5963	5963	5963	5963	5963	5963	5963	5963	5963	5963
Fixed Cost										
Direct Labor	180	180	180	180	180	180	180	180	180	180
Factory Overhead Cost	180	180	180	180	180	180	180	180	180	180
Maintenance & Repair	120	126	132	138	144	144	144	144	144	144
Insurance	94	87	80	74	68	63	59	54	51	47
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	574	573	572	572	572	567	563	558	555	551
Depreciation	760	697	639	586	538	495	456	420	387	358
Amortization	85	64	48	36	27	20	15	11	9	6
Work in Process										
Initial Work In Process	515	515	515	515	515	515	515	515	515	515
Final Work In Process	515	515	515	515	515	515	515	515	515	515
Production Cost	7383	7296	7222	7157	7101	7046	6996	6953	6913	6878

Table B-2 BBI

*** BADIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	1812	1812	1812	1812	8097	9177	9717	10256	10796	10796
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1812	1812	1812	1812	8097	9177	9717	10256	10796	10796
Costs & Expenses										
Cost of Goods Sold	1536	1536	1536	1537	6575	7183	7300	7426	7578	7483
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	1536	1536	1536	1537	6575	7183	7300	7426	7578	7483
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	45	45	45	45	121	134	141	147	154	154
General Administ. Expense	98	98	98	98	263	292	306	321	335	335
Interest on Long Term Loan	0	0	0	0	1166	1166	1166	1050	933	816
Interest on Short Term Loan	120	119	118	118	118	247	34	0	0	0
Sub-Total	1799	1798	1798	1798	8243	9022	8947	8943	9000	8789
Income Before Income Tax	13	14	14	14	-146	155	770	1313	1796	2007
Income Tax	0	0	1	4	0	2	268	458	627	701
Income After Income Tax	13	14	14	11	-146	153	502	855	1169	1306

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	10796	10796	10796	10796	10796	10796	10796	10796	10796	10796
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	10796	10796	10796	10796	10796	10796	10796	10796	10796	10796
Costs & Expenses										
Cost of Goods Sold	7383	7296	7222	7157	7101	7046	6996	6953	6913	6878
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	7383	7296	7222	7157	7101	7046	6996	6953	6913	6878
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	154	154	154	154	154	154	154	154	154	154
General Administ. Expense	335	335	335	335	335	335	335	335	335	335
Interest on Long Term Loan	700	583	466	350	233	117	-0	-0	-0	-0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	8571	8368	8177	7996	7823	7651	7485	7442	7402	7367
Income Before Income Tax	2225	2428	2619	2800	2973	3145	3311	3354	3394	3429
Income Tax	777	848	915	979	1039	1099	1157	1173	1186	1199
Income After Income Tax	1447	1579	1704	1822	1934	2046	2153	2182	2207	2230

Table B-3-(1) BBI

*** BARIRO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sources of Funds										
Profit Before Tax	13	14	14	14	-146	155	770	1313	1796	2007
Depreciation	15	16	17	18	1293	1194	1089	995	909	831
Amortization	5	4	3	2	478	358	269	202	151	113
Share Capital	99	623	2423	2158	0	0	0	0	0	0
Long Term Debt	203	1293	5099	5067	0	0	0	0	0	0
Short Term Debt	661	658	655	654	1373	188	0	0	0	0
Increase in Account Payable	0	0	0	0	0	0	0	0	0	0
Sub-total	997	2607	8211	7913	2999	1895	2129	2509	2856	2952
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	314	1809	6919	6137	213	155	30	30	30	30
Pre-Operation Expenses	0	0	33	58	0	0	0	0	0	0
Interest during Construction	18	136	600	1060	0	0	0	0	0	0
Increase in Account Reclevable	0	0	0	0	1571	270	135	135	135	0
Raw Mterial & Cons. Inventory	0	0	0	0	266	45	23	23	22	0
Half Finished Product Inventory	0	0	0	0	294	50	25	25	25	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	0	0	0	0	0	0	1166	1166	1166	1166
Repayment on Short Term Loan	665	661	658	655	654	1373	188	0	0	0
Income Tax Payment	0	0	1	4	0	2	268	458	627	701
Dividends Payment	0	0	0	0	0	0	100	171	234	261
Sub-total	997	2607	8211	7913	2999	1895	1935	2008	2239	2159
Cash Generation	0	0	0	0	0	0	194	501	617	793
Cum. Cash	0	0	0	0	0	0	194	695	1311	2104

Table B-3-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MMY) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sources of Funds										
Profit Before Tax	2225	2428	2619	2800	2973	3145	3311	3354	3394	3429
Depreciation	760	697	639	586	538	495	456	420	387	358
Amortization	85	64	48	36	27	20	15	11	9	6
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	0	0	0	0	0	0	0	0	0	0
Increase in Account Payable	0	0	0	0	0	0	0	0	0	0
Sub-total	3070	3188	3305	3422	3538	3660	3781	3786	3789	3793
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	30	30	30	30	30	30	30	30	30	30
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	0	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	0	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	1166	1166	1166	1166	1166	1166	0	0	0	0
Repayment on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Income Tax Payment	777	848	915	979	1039	1099	1157	1173	1186	1199
Dividends Payment	289	316	341	364	387	409	431	436	441	446
Sub-total	2263	2360	2452	2539	2622	2705	1618	1639	1658	1675
Cash Generation	807	828	853	883	916	955	2163	2147	2132	2118
Cum. Cash	2912	3739	4593	5475	6392	7347	9510	11657	13788	15907

Table B-4-(1) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--------- BALANCE SHEET ---------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Asset										
Cash on Hand & in Bank	42	42	42	42	42	42	235	736	1353	2146
Trade Account & Note Receivable	453	453	453	453	2024	2294	2429	2564	2699	2699
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Raw Material & Cons. Inventory	74	74	74	74	340	385	408	431	453	453
Work In Process	96	96	96	96	390	440	465	490	515	515
Inventory Total	1763	1763	1763	1763	2324	2419	2466	2514	2561	2561
Total Current Assets	2258	2258	2258	2258	4389	4755	5131	5814	6613	7406
Fixed Asset										
Land	7	7	7	7	7	7	7	7	7	7
Building	193	1706	4797	5129	5129	5129	5129	5129	5129	5129
Machinery & Equipment	263	529	4327	10102	10102	10102	10102	10102	10102	10102
Vehicle	29	29	29	29	29	29	29	29	29	29
Office Supply	26	26	26	26	26	26	26	26	26	26
Investment for Maintenance	60	90	120	150	363	518	548	578	608	638
Accumlated Depreciation	182	198	215	233	1526	2721	3810	4805	5713	6544
Book Value	396	2189	9091	15210	14130	13090	12031	11066	10187	9386
Intangible Assets										
Value	59	195	828	1947	1947	1947	1947	1947	1947	1947
Accumlated Amortization	26	30	33	35	513	871	1140	1342	1493	1606
Book Value	33	165	795	1912	1434	1075	807	605	454	340
Other Assets	33	33	33	33	33	33	33	33	33	33
Total Fixed Assets	461	2387	9919	17154	15596	14198	12870	11704	10674	9759
TOTAL ASSETS	2719	4645	12177	19412	19986	18953	18001	17518	17287	17165
Current Liabilities										
Trade Account & Notes Payable	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
S/T Bank Loan	661	658	655	654	1373	188	0	0	0	0
Current Portion of L/T Loan	0	0	0	0	0	1166	1166	1166	1166	1166
Other Current Liabilities	8	8	8	8	8	8	8	8	8	8
Total Current Liabilities	2569	2565	2562	2561	3281	3261	3074	3074	3074	3074
Long-Term Liabilities										
Long-Term Debt	203	1496	6595	11662	11662	10496	9330	8163	6997	5831
Stockholders Equity										
Capital	376	998	3421	5579	5579	5579	5579	5579	5579	5579
Retained Earning	-429	-415	-401	-391	-536	-383	18	702	1637	2682
Total	-53	584	3020	5188	5043	5195	5597	6281	7216	8261
TOTAL LIABILITY & EQUITY	2718	4644	12177	19411	19986	18953	18000	17518	17287	17165

Table B-4-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ---------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current Asset										
Cash on Hand & in Bank	2953	3781	4634	5517	6433	7388	9552	11698	13830	15948
Trade Account & Note Receivable	2699	2699	2699	2699	2699	2699	2699	2699	2699	2699
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Raw Material & Cons. Inventory	453	453	453	453	453	453	453	453	453	453
Work in Process	515	515	515	515	515	515	515	515	515	515
Inventory Total	2561	2561	2561	2561	2561	2561	2561	2561	2561	2561
Total Current Assets	8213	9041	9894	10777	11693	12649	14812	16958	19090	21208
Fixed Asset										
Land	7	7	7	7	7	7	7	7	7	7
Building	5129	5129	5129	5129	5129	5129	5129	5129	5129	5129
Machinery & Equipment	10102	10102	10102	10102	10102	10102	10102	10102	10102	10102
Vehicle	29	29	29	29	29	29	29	29	29	29
Office Supply	26	26	26	26	26	26	26	26	26	26
Investment for Maintenance	668	698	728	758	788	818	848	878	908	938
Accumlated Depreciation	7305	8001	8640	9226	9764	10259	10715	11135	11522	11879
Book Value	8656	7989	7381	6825	6317	5852	5426	5036	4679	4351
Intangible Assets										
Value	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947
Accumlated Amortization	1691	1755	1803	1839	1866	1886	1901	1912	1921	1927
Book Value	255	191	144	108	81	61	45	34	26	19
Other Assets	33	33	33	33	33	33	33	33	33	33
Total Fixed Assets	8944	8214	7557	6965	6430	5945	5504	5103	4737	4403
TOTAL ASSETS	17157	17255	17451	17742	18123	18594	20316	22061	23827	25611
Current Liabilities										
Trade Account & Notes Payable	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
S/T Bank Loan	0	0	0	0	0	0	0	0	0	0
Current Portion of L/T Loan	1166	1166	1166	1166	1166	0	0	0	0	0
Other Current Liabilities	8	8	8	8	8	8	8	8	8	8
Total Current Liabilities	3074	3074	3074	3074	3074	1908	1908	1908	1908	1908
Long-Term Liabilities										
Long-Term Debt	4665	3499	2332	1166	-0	-0	-0	-0	-0	-0
Stockholders Equity										
Capital	5579	5579	5579	5579	5579	5579	5579	5579	5579	5579
Retained Earning	3840	5103	6466	7923	9471	11107	12830	14575	16341	18125
Total	9419	10682	12045	13502	15049	16686	18409	20154	21920	23704
TOTAL LIABILITY & EQUITY	17157	17254	17451	17742	18123	18593	20316	22061	23827	25611

Table B-5-(1) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	62	62	62	62	62	62	62	62	62	62
Raw Material Purchaced	747	747	747	747	747	747	747	747	747	747
Final Raw Material Inventory	62	62	62	62	62	62	62	62	62	62
Raw Material Consumed	747	747	747	747	747	747	747	747	747	747
Consumable Cost										
Initial Consumable Inventory	11	11	11	11	11	11	11	11	11	11
Consumable Purchaced	45	45	45	45	45	45	45	45	45	45
Final Consumable Inventory	11	11	11	11	11	11	11	11	11	11
Consumable Consumed	45	45	45	45	45	45	45	45	45	45
Utilities	23	23	23	23	23	23	23	23	23	23
Others	350	350	350	350	350	350	350	350	350	350
Sub-Total	1165	1165	1165	1165	1165	1165	1165	1165	1165	1165
Fixed Cost										
Direct Labor	168	168	168	168	168	168	168	168	168	168
Factory Overhead Cost	168	168	168	168	168	168	168	168	168	168
Maintenance & Repair	14	14	14	14	14	14	14	14	14	14
Insurance	1	1	1	2	2	2	2	2	2	2
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	351	351	351	352	352	352	352	352	352	352
Depreciation	15	16	17	18	20	22	24	25	26	28
Amortization	5	4	3	2	2	1	1	1	0	0
Work in Process										
Initial Work in Process	96	96	96	96	96	96	96	96	96	96
Final Work in Process	96	96	96	96	96	96	96	96	96	96
Production Cost	1536	1536	1536	1537	1539	1540	1542	1543	1544	1546

Table B-5-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	62	62	62	62	62	62	62	62	62	62
Raw Material Purchaced	747	747	747	747	747	747	747	747	747	747
Final Raw Material Inventory	62	62	62	62	62	62	62	62	62	62
Raw Material Consumed	747	747	747	747	747	747	747	747	747	747
Consumable Cost										
Initial Consumanble Inventory	11	11	11	11	11	11	11	11	11	11
Consumable Purchaced	45	45	45	45	45	45	45	45	45	45
Final Consumable Inventory	11	11	11	11	11	11	11	11	11	11
Consumable Consumed	45	45	45	45	45	45	45	45	45	45
Utilities	23	23	23	23	23	23	23	23	23	23
Others	350	350	350	350	350	350	350	350	350	350
Sub-Total	1165	1165	1165	1165	1165	1165	1165	1165	1165	1165
Fixed Cost										
Direct Labor	168	168	168	168	168	168	168	168	168	168
Factory Overhead Cost	168	168	168	168	168	168	168	168	168	168
Maintenance & Repair	14	14	14	14	14	14	14	14	14	14
Insurance	3	3	3	3	3	3	3	3	3	3
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	353	353	353	353	353	353	353	353	353	353
Depreciation	30	31	32	33	34	36	37	38	39	40
Amortization	0	0	0	0	0	0	0	0	0	0
Work in Process										
Initial Work in Process	96	96	96	96	96	96	96	96	96	96
Final Work in Process	96	96	96	96	96	96	96	96	96	96
Production Cost	1547	1549	1550	1551	1552	1554	1555	1556	1557	1558

Table B-6 BBI

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Costs & Expenses										
Cost of Goods Sold	1536	1536	1536	1537	1539	1540	1542	1543	1544	1546
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	1536	1536	1536	1537	1539	1540	1542	1543	1544	1546
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	45	45	45	45	45	45	45	45	45	45
General Administ. Expense	98	98	98	98	98	98	98	98	98	98
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	120	119	118	118	118	118	119	120	120	121
Sub-Total	1799	1798	1798	1798	1799	1801	1803	1806	1807	1810
Income Before Income Tax	13	14	14	14	13	11	9	6	5	2
Income Tax	0	0	1	4	3	2	2	1	1	0
Income After Income Tax	13	14	14	11	10	8	7	5	4	2

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1812	1812	1812	1812	1812	1812	1812	1812	1812	1812
Costs & Expenses										
Cost of Goods Sold	1547	1549	1550	1551	1552	1554	1555	1556	1557	1558
Initial Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Production Cost	1547	1549	1550	1551	1552	1554	1555	1556	1557	1558
Final Product Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Selling Expenses	45	45	45	45	45	45	45	45	45	45
General Administ. Expense	98	98	98	98	98	98	98	98	98	98
Interest on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Interest on Short Term Loan	123	125	128	131	134	139	145	152	160	170
Sub-Total	1813	1817	1820	1824	1829	1836	1843	1851	1860	1871
Income Before Income Tax	-1	-5	-8	-12	-17	-24	-31	-39	-48	-59
Income Tax	0	0	0	0	0	0	0	0	0	0
Income After Income Tax	-1	-5	-8	-12	-17	-24	-31	-39	-48	-59

Table B-7-(1) BBI

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sources of Funds										
Profit Before Tax	13	14	14	14	13	11	9	6	5	2
Depreciation	15	16	17	18	20	22	24	25	26	28
Amortization	5	4	3	2	2	1	1	1	0	0
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	661	658	655	654	657	661	665	669	674	683
Increase in Account Payable	0	0	0	0	0	0	0	0	0	0
Sub-total	695	691	689	688	692	695	698	701	705	714
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	30	30	30	30	35	35	35	35	35	40
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	0	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	0	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Repayment on Short Term Loan	665	661	658	655	654	657	661	665	669	674
Income Tax Payment	0	0	1	4	3	2	2	1	1	0
Dividends Payment	0	0	0	0	0	0	0	0	0	0
Sub-total	695	691	689	688	692	695	698	701	705	714
Cash Generation	0	0	0	0	0	0	0	0	0	0
Cum. Cash	0	0	0	0	0	0	0	0	0	0

Table B-7-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MM¥) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sources of Funds										
Profit Before Tax	-1	-5	-8	-12	-17	-24	-31	-39	-48	-59
Depreciation	30	31	32	33	34	36	37	38	39	40
Amortization	0	0	0	0	0	0	0	0	0	0
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	695	709	725	744	772	805	844	891	945	1010
Increase in Account Payable	0	0	0	0	0	0	0	0	0	0
Sub-total	723	735	749	765	789	817	850	889	936	990
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	40	40	40	40	45	45	45	45	45	45
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	0	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	0	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	0	0	0	0	0	0	0	0	0	0
Repayment on Long Term Loan	0	0	0	0	0	0	0	0	0	0
Repayment on Short Term Loan	683	695	709	725	744	772	805	844	891	945
Income Tax Payment	0	0	0	0	0	0	0	0	0	0
Dividends Payment	0	0	0	0	0	0	0	0	0	0
Sub-total	723	735	749	765	789	817	850	889	936	990
Cash Generation	0	0	0	0	0	0	0	0	0	0
Cum. Cash	0	0	0	0	0	0	0	0	0	0

Table B-8-(1) BBI

*** BABIBO DEVELOPMENT PROJECT ***
--------- BALANCE SHEET ---------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BBI

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Asset										
Cash on Hand & in Bank	42	42	42	42	42	42	42	42	42	42
Trade Account & Note Receivable	453	453	453	453	453	453	453	453	453	453
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Raw Material & Cons. Inventory	74	74	74	74	74	74	74	74	74	74
Work in Process	96	96	96	96	96	96	96	96	96	96
Inventory Total	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763
Total Current Assets	2258	2258	2258	2258	2258	2258	2258	2258	2258	2258
Fixed Asset										
Land	7	7	7	7	7	7	7	7	7	7
Building	40	40	40	40	40	40	40	40	40	40
Machinery & Equipment	132	132	132	132	132	132	132	132	132	132
Vehicle	29	29	29	29	29	29	29	29	29	29
Office Supply	26	26	26	26	26	26	26	26	26	26
Investment for Maintenance	60	90	120	150	185	220	255	290	325	365
Accumlated Depreciation	182	198	215	233	254	276	299	324	351	379
Book Value	112	126	139	151	165	178	190	200	208	220
Intangible Assets										
Value	41	41	41	41	41	41	41	41	41	41
Accumlated Amortization	26	30	33	35	36	37	38	39	39	40
Book Value	14	11	8	6	5	3	3	2	1	1
Other Assets	33	33	33	33	33	33	33	33	33	33
Total Fixed Assets	159	169	180	189	203	214	225	234	242	254
TOTAL ASSETS	2416	2427	2437	2447	2460	2472	2482	2492	2500	2512
Current Liabilities										
Trade Account & Notes Payable	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
S/T Bank Loan	661	658	655	654	657	661	665	669	674	683
Current Portion of L/T Loan	0	0	0	0	0	0	0	0	0	0
Other Current Liabilities	8	8	8	8	8	8	8	8	8	8
Total Current Liabilities	2569	2565	2562	2561	2565	2568	2572	2576	2581	2591
Long-Term Liabilities										
Long-Term Debt	0	0	0	0	0	0	0	0	0	0
Stockholders Equity										
Capital	276	276	276	276	276	276	276	276	276	276
Retained Earning	-429	-415	-401	-391	-381	-373	-366	-361	-357	-356
Total	-153	-139	-125	-114	-105	-97	-90	-85	-81	-79
TOTAL LIABILITY & EQUITY	2416	2427	2437	2447	2460	2472	2482	2492	2500	2511

Table B-8-(2) BBI

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ---------
< EXISTING PLANT WITHOUT DEVELOP. >

(UNIT:MMY) BBI

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current Asset										
Cash on Hand & In Bank	42	42	42	42	42	42	42	42	42	42
Trade Account & Note Receivable	453	453	453	453	453	453	453	453	453	453
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
Raw Material & Cons. Inventory	74	74	74	74	74	74	74	74	74	74
Work In Process	96	96	96	96	96	96	96	96	96	96
Inventory Total	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763
Total Current Assets	2258	2258	2258	2258	2258	2258	2258	2258	2258	2258
Fixed Asset										
Land	7	7	7	7	7	7	7	7	7	7
Building	40	40	40	40	40	40	40	40	40	40
Machinery & Equipment	132	132	132	132	132	132	132	132	132	132
Vehicle	29	29	29	29	29	29	29	29	29	29
Office Supply	26	26	26	26	26	26	26	26	26	26
Investment for Maintenance	405	445	485	525	570	615	660	705	750	795
Accumulated Depreciation	408	439	471	504	538	574	611	649	688	727
Book Value	231	240	248	255	265	275	283	290	296	301
Intangible Assets										
Value	41	41	41	41	41	41	41	41	41	41
Accumulated Amortization	40	40	40	40	41	41	41	41	41	41
Book Value	1	1	0	0	0	0	0	0	0	0
Other Assets	33	33	33	33	33	33	33	33	33	33
Total Fixed Assets	264	273	281	288	298	308	316	323	329	334
TOTAL ASSETS	2522	2531	2539	2546	2556	2565	2573	2580	2586	2592
Current Liabilities										
Trade Account & Notes Payable	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
S/T Bank Loan	695	709	725	744	772	805	844	891	945	1010
Current Portion of L/T Loan	0	0	0	0	0	0	0	0	0	0
Other Current Liabilities	8	8	8	8	8	8	8	8	8	8
Total Current Liabilities	2603	2616	2633	2652	2680	2713	2752	2798	2853	2917
Long-Term Liabilities										
Long-Term Debt	0	0	0	0	0	0	0	0	0	0
Stockholders Equity										
Capital	276	276	276	276	276	276	276	276	276	276
Retained Earning	-357	-362	-370	-383	-400	-424	-455	-494	-543	-602
Total	-81	-86	-94	-106	-124	-148	-179	-218	-266	-326
TOTAL LIABILITY & EQUITY	2522	2531	2539	2545	2556	2565	2573	2580	2586	2592

Table C-1-(1) BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	295	295	295	295	295	1443	1503	1553	1608	1664
Raw Material Purchaced	354	354	354	354	2880	1862	1915	1985	2053	1997
Final Raw Material Inventory	295	295	295	295	1443	1503	1553	1608	1664	1664
Raw Material Consumed	354	354	354	354	1732	1803	1864	1930	1997	1997
Consumable Cost										
Initial Consumanble Inventory	2	2	2	2	2	3	3	3	3	3
Consumable Purchaced	18	18	18	18	33	32	31	31	31	31
Final Consumable Inventory	2	2	2	2	3	3	3	3	3	3
Consumable Consumed	18	18	18	18	32	32	31	31	31	31
Utilities	17	17	17	17	42	42	42	42	42	42
Others	496	496	496	496	723	715	707	699	691	691
Sub-Total	885	885	885	885	2529	2592	2644	2702	2761	2761
Fixed Cost										
Direct Labor	79	79	79	79	81	81	81	81	81	81
Factory Overhead Cost	79	79	79	79	81	81	81	81	81	81
Maintenance & Repair	25	25	25	25	48	48	48	48	48	48
Insurance	1	2	2	2	28	26	24	22	20	18
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	184	185	185	185	238	236	234	232	230	228
Depreciation	15	15	16	17	271	248	227	207	190	174
Amortization	0	0	0	0	120	90	67	51	38	28
Work in Process										
Initial Work in Process	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038
Final Work in Process	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038
Production Cost	1084	1085	1086	1087	3159	3166	3172	3191	3218	3191

Table C-1-(2) BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
--- PRODUCTION COST ACCOUNTING ---
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Variable Cost										
Raw Material Cost										
Initial Raw Material Inventory	1664	1664	1664	1664	1664	1667	1667	1667	1667	1667
Raw Material Purchaced	1997	1997	1997	1997	2003	2000	2000	2000	2000	2000
Final Raw Material Inventory	1664	1664	1664	1664	1667	1667	1667	1667	1667	1667
Raw Material Consumed	1997	1997	1997	1997	2000	2000	2000	2000	2000	2000
Consumable Cost										
Initial Consumanble Inventory	3	3	3	3	3	3	3	3	3	3
Consumable Purchaced	31	31	31	31	30	30	30	30	30	30
Final Consumable Inventory	3	3	3	3	3	3	3	3	3	3
Consumable Consumed	31	31	31	31	30	30	30	30	30	30
Utilities	42	42	42	42	42	42	42	42	42	42
Others	691	691	691	691	666	666	666	666	666	666
Sub-Total	2761	2761	2761	2761	2738	2738	2738	2738	2738	2738
Fixed Cost										
Direct Labor	81	81	81	81	76	76	76	76	76	76
Factory Overhead Cost	81	81	81	81	76	76	76	76	76	76
Maintenance & Repair	48	48	48	48	46	46	46	46	46	46
Insurance	17	15	14	13	12	11	10	10	9	8
Others	0	0	0	0	0	0	0	0	0	0
Sub-Total	227	225	224	223	210	209	208	208	207	206
Depreciation	160	147	135	125	115	107	99	92	86	80
Amortization	21	16	12	9	7	5	4	3	2	2
Work in Process										
Initial Work in Process	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038
Final Work in Process	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038
Production Cost	3169	3149	3132	3118	3070	3059	3049	3040	3033	3026

Table C-2 BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
-------- INCOME STATEMENT --------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Revenues										
Net Sales	1337	1337	1337	1337	4580	4850	5022	5194	5366	5371
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	1337	1337	1337	1337	4580	4850	5022	5194	5366	5371
Costs & Expenses										
Cost of Goods Sold	1084	1085	1086	1087	3096	3166	3172	3191	3218	3192
Initial Product Inventory	33	33	33	33	33	95	96	96	96	97
Production Cost	1084	1085	1086	1087	3159	3166	3172	3191	3218	3191
Final Product Inventory	33	33	33	33	95	96	96	96	97	96
Selling Expenses	11	11	11	11	25	26	27	27	28	28
General Administ. Expense	68	68	68	68	151	158	162	166	171	171
Interest on Long Term Loan	8	7	5	4	211	210	209	188	167	146
Interest on Short Term Loan	86	82	77	72	66	153	37	0	0	0
Sub-Total	1257	1252	1248	1242	3550	3713	3606	3572	3584	3537
Income Before Income Tax	80	85	89	95	1030	1137	1416	1622	1782	1834
Income Tax	27	28	30	32	359	397	494	566	622	640
Income After Income Tax	53	56	59	63	671	741	922	1056	1160	1193

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues										
Net Sales	5371	5371	5371	5371	5380	5381	5381	5381	5381	5381
Other Net	0	0	0	0	0	0	0	0	0	0
Sub-Total	5371	5371	5371	5371	5380	5381	5381	5381	5381	5381
Costs & Expenses										
Cost of Goods Sold	3169	3150	3133	3118	3071	3059	3049	3041	3033	3026
Initial Product Inventory	96	96	95	94	94	93	92	92	92	91
Production Cost	3169	3149	3132	3118	3070	3059	3049	3040	3033	3026
Final Product Inventory	96	95	94	94	93	92	92	92	91	91
Selling Expenses	28	28	28	28	28	28	28	28	28	28
General Administ. Expense	171	171	171	171	171	171	171	171	171	171
Interest on Long Term Loan	125	104	83	63	42	21	-0	-0	-0	-0
Interest on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Sub-Total	3493	3453	3415	3380	3312	3279	3248	3240	3232	3225
Income Before Income Tax	1878	1918	1956	1991	2068	2102	2133	2141	2149	2156
Income Tax	656	670	683	696	722	734	745	748	751	753
Income After Income Tax	1222	1248	1273	1296	1346	1368	1388	1393	1398	1403

Table C-3-(1) BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sources of Funds										
Profit Before Tax	80	85	89	95	1030	1137	1416	1622	1782	1834
Depreciation	15	15	16	17	271	248	227	207	190	174
Amortization	0	0	0	0	120	90	67	51	38	28
Share Capital	15	13	734	177	0	0	0	0	0	0
Long Term Debt	31	31	1506	519	0	0	0	0	0	0
Short Term Debt	454	430	401	369	849	206	0	0	0	0
Increase in Account Payable	1	0	0	0	635	-255	13	18	17	-14
Sub-total	596	574	2747	1177	2906	1427	1723	1898	2027	2022
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	69	63	2090	426	133	32	25	25	25	25
Pre-Operation Expenses	0	0	33	106	0	0	0	0	0	0
Interest during Construction	3	6	143	190	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	811	68	43	43	43	1
Raw Mterial & Cons. Inventory	0	0	0	0	1150	59	51	55	56	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	-0	0	0	0	62	0	0	1	1	-1
Repayment on Long Term Loan	22	22	22	22	22	22	209	209	209	209
Repayment on Short Term Loan	476	454	430	401	369	849	206	0	0	0
Income Tax Payment	27	28	30	32	359	397	494	566	622	640
Dividends Payment	0	0	0	0	0	0	184	211	232	239
Sub-total	596	574	2747	1177	2906	1427	1212	1110	1188	1113
Cash Generation	0	0	0	0	0	0	511	788	839	909
Cum. Cash	0	0	0	0	0	0	511	1298	2138	3046

Table C-3-(2) BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
------ FUNDS FLOW STATEMENT ------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sources of Funds										
Profit Before Tax	1878	1918	1956	1991	2068	2102	2133	2141	2149	2156
Depreciation	160	147	135	125	115	107	99	92	86	80
Amortization	21	16	12	9	7	5	4	3	2	2
Share Capital	0	0	0	0	0	0	0	0	0	0
Long Term Debt	0	0	0	0	0	0	0	0	0	0
Short Term Debt	0	0	0	0	0	0	0	0	0	0
Increase in Account Payable	0	0	0	0	1	-1	0	0	0	0
Sub-total	2058	2081	2103	2125	2191	2213	2235	2236	2237	2237
Uses of Funds										
Land & Site Investment	0	0	0	0	0	0	0	0	0	0
Constructed Facilities	25	25	25	25	25	25	25	25	25	25
Pre-Operation Expenses	0	0	0	0	0	0	0	0	0	0
Interest during Construction	0	0	0	0	0	0	0	0	0	0
Increase in Account Recievable	0	0	0	0	2	0	0	0	0	0
Raw Mterial & Cons. Inventory	0	0	0	0	2	0	0	0	0	0
Half Finished Product Inventory	0	0	0	0	0	0	0	0	0	0
Product Inventory	-1	-1	-1	-0	-1	-0	-0	-0	-0	-0
Repayment on Long Term Loan	209	209	209	209	209	209	0	0	0	0
Repayment on Short Term Loan	0	0	0	0	0	0	0	0	0	0
Income Tax Payment	656	670	683	696	722	734	745	748	751	753
Dividends Payment	244	250	255	259	269	274	278	279	280	281
Sub-total	1133	1153	1171	1188	1228	1241	1047	1051	1055	1059
Cash Generation	925	928	932	937	962	972	1188	1185	1182	1179
Cum. Cash	3972	4900	5832	6769	7731	8703	9891	11075	12257	13436

Table C-4-(1) BOMA STORK

*** BABIBO DEVELOPMENT PROJECT ***
---------- BALANCE SHEET ---------
< EXISTING PLANT WITH DEVELOPMENT >

(UNIT:MM¥) BOMA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Asset										
Cash on Hand & In Bank	3	3	3	3	3	3	514	1301	2141	3049
Trade Account & Note Receivable	334	334	334	334	1145	1213	1256	1299	1342	1343
Prepaid Cost & Expense	0	0	0	0	0	0	0	0	0	0
Products Inventory	33	33	33	33	95	96	96	96	97	96
Raw Material & Cons. Inventory	297	297	297	297	1446	1505	1556	1611	1667	1667
Work In Process	1038	1038	1038	1038	1038	1038	1038	1038	1038	1038
Inventory Total	1367	1367	1367	1367	2579	2639	2690	2745	2802	2801
Total Current Assets	1705	1705	1705	1705	3727	3854	4459	5345	6284	7193
Fixed Asset										
Land	1	1	1	1	1	1	1	1	1	1
Building	89	89	172	381	381	381	381	381	381	381
Machinery & Equipment	227	266	2247	2439	2439	2439	2439	2439	2439	2439
Vehicle	27	27	27	27	27	27	27	27	27	27
Office Supply	48	48	48	48	48	48	48	48	48	48
Investment for Maintenance	50	75	100	125	258	289	314	339	364	389
Accumulated Depreciation	271	287	303	320	592	840	1066	1274	1463	1637
Book Value	171	219	2293	2701	2563	2346	2145	1962	1798	1649
Intangible Assets										
Value	3	8	184	480	480	480	480	480	480	480
Accumulated Amortization	0	0	0	0	120	210	277	328	366	394
Book Value	3	8	184	480	360	270	202	152	114	85
Other Assets	219	219	219	219	219	219	219	219	219	219
Total Fixed Assets	393	447	2696	3400	3141	2835	2566	2333	2131	1953
TOTAL ASSETS	2098	2152	4401	5105	6869	6689	7025	7678	8415	9147
Current Liabilities										
Trade Account & Notes Payable	93	93	93	93	728	474	486	504	521	507
S/T Bank Loan	454	430	401	369	849	206	0	0	0	0
Current Portion of L/T Loan	22	22	22	22	22	209	209	209	209	209
Other Current Liabilities	1251	1251	1251	1251	1251	1251	1251	1251	1251	1251
Total Current Liabilities	1820	1796	1767	1735	2850	2139	1946	1963	1980	1966
Long-Term Liabilities										
Long-Term Debt	121	129	1613	2109	2087	1878	1670	1461	1252	1043
Stockholders Equity										
Capital	75	89	823	1000	1000	1000	1000	1000	1000	1000
Retained Earning	81	138	197	260	931	1672	2409	3254	4182	5137
Total	157	227	1021	1261	1932	2672	3410	4254	5182	6137
TOTAL LIABILITY & EQUITY	2098	2152	4401	5105	6869	6689	7025	7678	8415	9147