

Appendix - 7 List of Planned Equipment Classified by VTC

MACHINE SHOP

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
MS- 1	CENTER LATHE (360 X 550)	8	SET	3	3	2		
MS- 2	CENTER LATHE (510 X 1500)	11	SET	4	3	4		
MS- 3	CENTER LATHE (510 X 2000)	6	SET	2	2	2		
MS- 4	UPRIGHT DRILLING MACHINE	4	SET	1	2	1		
MS- 5	RADIAL DRILLING MACHINE	3	SET	1	1	1		
MS- 6	VERTICAL MILLING MACHINE	5	SET	2	2	1		
MS- 7	UNIVERSAL MILLING MACHINE	6	SET	2	2	2		
MS- 8	SHAPING MACHINE	6	SET	2	2	2		
MS- 9	COPYING LATHE	3	SET	1	1	1		
MS-10	SURFACE GRINDING MACHINE	6	SET	2	2	2		
MS-11	CYLINDRICAL GRINDING MACHINE	3	SET	1	1	1		
MS-12	POWER HACKSAW	6	SET	2	2	2		
MS-13	PEDESTAL GRINDING MACHINE	4	SET	1	2	1		
MS-14	TWIST DRILL GRINDING MACHINE	3	SET	1	1	1		
MS-15	UNIVERSAL TOOL GRINDER	3	SET	1	1	1		
MS-16	BENCH DRILLING MACHINE	6	SET	2	2	2		
MS-17	CUT OFF GRINDING MACHINE	3	SET	1	1	1		
MS-18	AIR COMPRESSOR	3	SET	1	1	1		
MS-19	FACE MILLING CUTTER	6	SET	2	2	2		
MS-20	PLANE MILLING CUTTER SET	12	SET	4	4	4		
MS-21	END MILL SET	12	SET	4	4	4		
MS-22	HEAVY DUTY END MILL SET	6	SET	2	2	2		
MS-23	BALL END MILLING CUTTER SET	3	SET	1	1	1		
MS-24	SHELL END MILL SET	12	SET	4	4	4		
MS-25	ROUGHING END MILL	12	SET	4	4	4		
MS-26	T-SLOT MILLING CUTTER SET	12	SET	4	4	4		
MS-27	SIDE MILLING CUTTER SET	12	SET	4	4	4		
MS-28	CONCAVE MILLING CUTTER SET	12	SET	4	4	4		
MS-29	CONVEX MILLING CUTTER SET	12	SET	4	4	4		
MS-30	SINGLE ANGULAR MILLING CUTTER SET	12	SET	4	4	4		
MS-31	SINGLE ANGLE MILLING CUTTER SET	12	SET	4	4	4		
MS-32	DOUBLE ANGLE MILLING CUTTER SET	12	SET	4	4	4		
MS-33	GEAR CUTTER	3	SET	1	1	1		
MS-34	TWIST DRILL SET	6	SET	3	3	0		
MS-35	CENTRE DRILL	3	SET	1	1	1		

MACHINE SHOP

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
MS-36	TAPER REAMER SET	3	SET	1	1	1		
MS-37	TAPER REAMER SET (FINISHING)	3	SET	1	1	1		
MS-38	CEMENTED CARBIDE CHIP	30	PCS	10	10	10		
MS-39	KNURL	2	SET	1	1	0		
MS-40	DIAL TEST INDICATOR W/STAND	6	PCS	2	2	2		
MS-41-1	VERNIER CALIPER (INCH SCALE)	15	PCS	5	10	0		
MS-41-2	VERNIER CALIPER W/DIAL GAUGE (INCH)	8	PCS	2	4	2		
MS-42-1	VERNIER CALIPER (150MM)	40	PCS	10	10	20		
MS-42-2	VERNIER CALIPER (300MM)	4	PCS	1	1	2		
MS-42-3	VERNIER CALIPER (1000MM)	4	PCS	1	1	2		
MS-43-1	DIGITAL MICROMETER (OUT 0 - 25MM)	6	PCS	2	2	2		
MS-43-2	DIGITAL MICROMETER (OUT 25 - 50MM)	6	PCS	2	2	2		
MS-43-3	DIGITAL MICROMETER (OUT 50 - 75MM)	6	PCS	2	2	2		
MS-43-4	DIGITAL MICROMETER (IN 25 - 50MM)	6	PCS	2	2	2		
MS-43-5	DIGITAL MICROMETER (IN 50 - 75MM)	6	PCS	2	2	2		
MS-43-6	DIGITAL MICROMETER (IN 75 - 100MM)	6	PCS	2	2	2		
MS-43-7	DIGITAL DEPTH MICROMETER (0 - 25MM)	6	PCS	2	2	2		
MS-43-8	DIGITAL DEPTH MICROMETER (0 - 50MM)	6	PCS	2	2	2		
MS-44-1	INSIDE MICROMETER (50 - 25MM)	6	PCS	2	2	2		
MS-44-2	INSIDE MICROMETER (75 - 100MM)	6	PCS	2	2	2		
MS-44-3	INSIDE MICROMETER (100 - 125MM)	2	PCS	0	0	2		
MS-44-4	INSIDE MICROMETER (125 - 150MM)	2	PCS	0	0	2		
MS-45-1	OUTSIDE MICROMETER (100 - 125MM)	2	PCS	0	0	2		
MS-45-2	OUTSIDE MICROMETER (125 - 150MM)	2	PCS	0	0	2		
MS-46	DIGITAL INDICATOR	6	PCS	2	2	2		
MS-47	VERNIER HEIGHT GAUGE	3	PCS	1	1	1		
MS-48	VERNIER DIGITAL HEIGHT GAUGE	3	PCS	1	1	1		
MS-49	THREAD MICROMETER	6	PCS	2	2	2		
MS-50	SCREW PITCH GAUGE	15	PCS	5	5	5		
MS-51	GEAR MICROMETER	3	PCS	1	1	1		
MS-52	RADIUS GAUGE	9	SET	3	3	3		
MS-53	STEEL PLAIN PROTRACTOR	3	PCS	1	1	1		
MS-54	COMBINATION SQUARE	3	PCS	1	1	1		
MS-55	GRADUATED SQUARE	3	PCS	1	1	1		
MS-56	SURFACE PLATE	3	SET	1	1	1		

MACHINE SHOP

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
MS-57	MULTI TESTER	1	PCS	0	0	1		
MS-58	UNIVERSAL HARDNESS TESTER	2	SET	0	1	1		
MS-59	DIAMOND DRESSER	9	PCS	3	3	3		
MS-60	TOOL HOLDER	6	SET	2	2	2		
MS-61	BENCH VICE	20	PCS	0	0	20		
MS-62	BENCH VICE (UNIVERSAL TYPE)	6	PCS	2	2	2		
MS-63	TOOLS CABINET	15	SET	5	5	5		
MS-64	HAND PALLET TRUCK	2	SET	0	1	1		
MS-65	EDUCATIONAL VIDEO TAPES	3	SET	1	1	1		

ARC WELDING

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
AW- 1	ARC WELDING MACHINE	20	SET	5	8	7		
AW- 2	ARC WELDING MACHINE (LARGE)	11	SET	2	5	4		
AW- 3	AC/DC INTEGRATED TIG WELDING SET	4	SET	1	2	1		
AW- 4	MIG WELDING SET	4	SET	1	2	1		
AW- 5	PLASMA WELDING MACHINE	3	SET	1	1	1		
AW- 6	AUTOMATIC FLAME PLATE CUTTING M/C	3	SET	1	1	1		
AW- 7	AUTOMATIC FLAME PIPE CUTTING M/C	3	SET	1	1	1		
AW- 8	BEVEL CUTTING MACHINE	3	SET	1	1	1		
AW- 9	GAS WELDING KIT	10	SET	0	0	10		
AW-10	SHEARING MACHINE	3	SET	1	1	1		
AW-11	PLATE BENDING MACHINE	1	SET	0	0	1		
AW-12	PIPE BENDER	1	SET	0	0	1		
AW-13	BENDING ROLL MACHINE	3	SET	1	1	1		
AW-14	PEDESTAL GRINDING MACHINE	3	SET	1	1	1		
AW-15-1	HAND GRINDER (1)	15	PCS	5	5	5		
AW-15-2	HAND GRINDER (2)	6	PCS	2	2	2		
AW-16	CUT OFF GRINDING MACHINE	3	SET	1	1	1		
AW-17	BENCH DRILLING MACHINE	4	SET	2	2	0		
AW-18	UPRIGHT DRILLING MACHINE	2	SET	1	1	0		
AW-19	HAND DRILLING MACHINE	9	PCS	3	3	3		
AW-20	POWER HACKSAW	3	SET	1	1	1		
AW-21	SHEET METAL FOLDING MACHINE	3	SET	1	1	1		
AW-22	FLANGING AND BENDING MACHINE	3	SET	1	1	1		
AW-23	RIVETING MACHINE	15	PCS	5	5	5		
AW-24	UNIVERSAL TESTING MACHINE	3	SET	1	1	1		
AW-25	MATERIAL BENDING TESTER	3	SET	1	1	1		
AW-26	X - RAY RADIOGRAPHIC EQUIPMENT	3	SET	1	1	1		
AW-27	ULTRASONIC TESTER	3	SET	1	1	1		
AW-28	MAGNETIC PARTICLE TESTER	3	SET	1	1	1		
AW-29	HYDRAULIC TESTER	1	SET	0	0	1		
AW-30	AIR COMPRESSOR	3	SET	1	1	1		
AW-31	STATIONARY ELECTRODE DRIER	3	SET	1	1	1		
AW-32	PORTABLE ELECTRODE DRIER	20	PCS	5	10	5		
AW-33	BLOWER (FUME EXTRACTOR)	6	SET	2	2	2		
AW-34	POSITIONER	1	SET	0	0	1		

ARC WELDING

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
AW-35	WELDING TABLE	45	PCS	10	18	17		
AW-36	SAFETY TROLLEY	4	SET	1	1	2		
AW-37	AMPERE TONGS	3	SET	1	1	1		
AW-38	WORK BENCH	15	SET	5	5	5		
AW-39	HAND POWER CHISEL	15	PCS	5	5	5		
AW-40	TAP & DIE SET (MM SIZE)	20	PCS	10	10	0		
AW-41	TAP & DIE SET (INCH SIZE)	20	PCS	10	10	0		
AW-42	PIPE THREAD CUTTER	2	SET	1	1	0		
AW-43	WELDING GAUGE	15	PCS	5	5	5		
AW-44-1	SQUARE (SMALL)	30	PCS	10	10	10		
AW-44-2	SQUARE (LARGE)	15	PCS	5	5	5		
AW-45	STEEL RULE	30	PCS	10	10	10		
AW-46	MEASURING TAPE	15	PCS	5	5	5		
AW-47	SELF GRIP WELDING TONGS	30	PCS	10	10	10		
AW-48	CHIPPING HAMMER	40	PCS	15	15	10		
AW-49	ANVIL	6	PCS	2	2	2		
AW-50	BENCH VISE	50	PCS	20	20	10		
AW-51	DIVIDERS	30	PCS	10	10	10		
AW-52	SCRIBER	30	PCS	10	10	10		
AW-53	C CLAMP	15	PCS	5	5	5		
AW-54	PIPE WRENCH	10	SET	5	5	0		
AW-55	WELDING MASK	55	PCS	20	20	15		
AW-56	SLIDE PROJECTOR	3	SET	1	1	1		
AW-57	OVERHEAD PROJECTOR	3	SET	1	1	1		
AW-58	EDUCATIONAL VIDEO TAPES	3	SET	1	1	1		

REFRIGERATION REPAIR AND SERVICE

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
RS- 1	REFRIGERATOR (1)	10	SET	6	4			
RS- 2	REFRIGERATOR (2)	3	SET	2	1			
RS- 3	COMBINATION REFRIGERATOR	3	SET	2	1			
RS- 4	FREEZER	2	SET	1	1			
RS- 5	WINDOW TYPE AIR-CONDITIONER	10	SET	6	4			
RS- 6	SPLIT TYPE AIR-CONDITIONER	10	SET	6	4			
RS- 7	PACKAGE TYPE AIR-CONDITIONER	2	SET	1	1			
RS- 8	CENTRAL AIR CONDITIONING SYSTEM	2	SET	1	1			
RS- 9	ABSORPTION TYPE AIR COOLING SYSTEM	3	SET	2	1			
RS-10	AIR COMPRESSOR	4	SET	2	2			
RS-11	CONDENSING UNIT	2	SET	1	1			
RS-12	DEFROST HEATER	2	SET	1	1			
RS-13	SINGLE PHASE COMPRESSOR	2	SET	1	1			
RS-14	AIR CLEANING NOZZLE	6	SET	4	2			
RS-15	MOTOR SPEED CONTROLLER	3	SET	2	1			
RS-16	THERMOSTAT	3	PCS	2	1			
RS-17	ELECTRONIC THERMOSTAT	3	PCS	2	1			
RS-18	DIFFERENTIAL THERMOSTAT	3	PCS	2	1			
RS-19	AIR FLOW SWITCH	3	PCS	2	1			
RS-20	WATER LEVEL SWITCH	3	PCS	2	1			
RS-21	CAPACITOR	3	PCS	2	1			
RS-22	THERMAL RELAY	15	PCS	10	5			
RS-23	ELECTROMAGNETIC SWITCH	15	PCS	10	5			
RS-24	SENSOR	9	PCS	6	3			
RS-25	RELAY	7	SET	5	2			
RS-26	OVERLOAD LIMIT SWITCH	7	PCS	5	2			
RS-27	TEMPERATURE PROBE	3	PCS	2	1			
RS-28	PILOT LIGHT	30	PCS	20	10			
RS-29	AIR FLOW METER	2	SET	1	1			
RS-30	ANEMO METER	2	SET	1	1			
RS-31	HYGROTHERMOGRAPH	3	PCS	2	1			
RS-32	CLIP-ON METER	4	SET	2	2			
RS-33	DIGITAL MULTIMETER	3	PCS	2	1			
RS-34	HYGROSTAT	3	SET	2	1			
RS-35	GAS LEAK DETECTOR (1)	6	SET	4	2			

REFRIGERATION REPAIR AND SERVICE

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
RS-36	GAS LEAK DETECTOR (2)	2	SET	1	1			
RS-37	CONSTANT PRESSURE VALVE	3	PCS	2	1			
RS-38	PILOT PRESSURE VALVE	3	PCS	2	1			
RS-39	VACUUM PUMP	4	SET	2	2			
RS-40	CHARGING CYLINDER	3	SET	2	1			
RS-41	CHARGING MANIFOLD	10	SET	8	2			
RS-42	CHARGING HOSE	21	SET	15	6			
RS-43	CHARGING UNITS	10	SET	6	4			
RS-44	RECOVERY & RECYCLING SYSTEM	2	SET	1	1			
RS-45	GAS CUTTING/WELDING SET	2	SET	1	1			
RS-46-1	PIPE BENDER (SMALL)	15	PCS	10	5			
RS-46-2	PIPE BENDER (MEDIUM)	25	PCS	15	10			
RS-47-1	SWAGING TOOL (SMALL)	15	PCS	10	5			
RS-47-2	SWAGING TOOL (LARGE)	3	PCS	2	1			
RS-48	ELECTRIC PIPE CUTTER	3	PCS	2	1			
RS-49	PIPE REAMER	15	PCS	10	5			
RS-50	FLARING TOOL	15	PCS	10	5			
RS-51	EXTRACTOR KIT	3	SET	2	1			
RS-52	GLASS CUTTER	3	PCS	2	1			
RS-53-1	PIPE CUTTER FOR COPPER (SMALL)	15	PCS	10	5			
RS-53-2	PIPE CUTTER FOR COPPER (LARGE)	15	PCS	10	5			
RS-54	SOCKET	30	PCS	20	10			
RS-55	PILLAR DRILLING MACHINE	3	SET	2	1			
RS-56	ELECTRIC DRILL	4	SET	2	2			
RS-57	IMPACT ELECTRIC DRILL	4	SET	2	2			
RS-58	PEDESTAL GRINDING MACHINE	2	SET	1	1			
RS-59	VICE	8	PCS	4	4			
RS-60	PIPE VICE	2	PCS	1	1			
RS-61	TOOL TERMINAL BLOCK SET	30	PCS	20	10			
RS-62	BENCH VICE	3	PCS	2	1			
RS-63	PARTS AND TESTER	2	SET	1	1			
RS-64	REFRIGERATION FUNDAMENTAL TRAINER (1)	2	SET	1	1			
RS-65	REFRIGERATION FUNDAMENTAL TRAINER (2)	2	SET	1	1			
RS-66	HEAT PUMP CYCLE TRAINER	2	PCS	1	1			
RS-67	INDUSTRIAL REFRIGERATOR TRAINER	2	SET	1	1			

REFRIGERATION REPAIR AND SERVICE

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
RS-68	REFRIGERATION DIAGNOSTIC TRAINER	2	SET	1	1			
RS-69	REFRIGERATOR TRAINER	2	SET	1	1			
RS-70	EDUCATIONAL VIDEO TAPES	2	SET	1	1			

PIPE FITTING

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
PF- 1	ARC WELDING MACHINE	6	PCS		4	2		
PF- 2	GAS WELDING KIT	7	SET		5	2		
PF- 3	GAS PIPE CUTTING SET	3	SET		2	1		
PF- 4	UPRIGHT DRILLING MACHINE	2	SET		1	1		
PF- 5	BENCH DRILLING MACHINE	4	SET		2	2		
PF- 6-1	HAND GRINDER (5")	15	SET		10	5		
PF- 6-2	HAND GRINDER (7")	9	SET		7	2		
PF- 7	TWIST DRILL SET	4	SET		2	2		
PF- 8	PIPE CUTTER	2	PCS		1	1		
PF- 9	ROLL PIPE CUTTER	20	PCS		12	8		
PF-10	CAST IRON PIPE CUTTER	2	PCS		1	1		
PF-11	PIPE THREADING MACHINE	2	SET		1	1		
PF-12	PIPE THREAD HANDLE (MANUAL)	8	PCS		4	4		
PF-13	PIPE THREAD DIES	8	PCS		4	4		
PF-14	TAP AND DIES SET	8	SET		5	3		
PF-15	WORK BENCH	12	PCS		8	4		
PF-16	BENCH VISE	40	PCS		20	20		
PF-17	SLEDGE HAMMER	40	SET		20	20		
PF-18	BLACKSMITH TONGS	8	PCS		5	3		
PF-19	DIVIDER	20	SET		15	5		
PF-20	SCRIBER	30	PCS		20	10		
PF-21	ADJUSTABLE WRENCH	14	PCS		10	4		
PF-22-1	SHEARS (STREIGHT)	8	PCS		5	3		
PF-22-2	SHEARS (LEFT HAND)	4	PCS		3	1		
PF-23	HACKSAW FRAME	15	PCS		10	5		
PF-24	COLD CHISEL	30	PCS		20	10		
PF-25	PIPE WRENCH	20	PCS		10	10		
PF-26	FLAT FILES & HANDLES	40	SET		20	20		
PF-27	SURFACE GAUGE	10	PCS		5	5		
PF-28	CENTER PUNCH	20	PCS		10	10		
PF-29	TRAMMELS	2	PCS		1	1		
PF-30	HYDRAULIC PRESSURE TESTER	2	UNIT		1	1		
PF-31-1	STEEL RULE (300mm)	40	PCS		20	20		
PF-31-2	STEEL RULE (1,000mm)	15	PCS		10	5		
PF-32	MEASURING TAPE	30	PCS		20	10		

PIPE FITTING

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
PF-33	VERNIER CALIPERS	40	PCS		20	20		
PF-34	VERNIER HEIGHT GAUGE	4	PCS		2	2		
PF-35	LEVEL	20	PCS		15	5		
PF-36-1	SQUARE (150 X 100 MM)	40	PCS		20	20		
PF-36-2	SQUARE (200 X 130 MM)	20	PCS		10	10		
PF-36-3	SQUARE (600 X 400 MM)	20	PCS		15	5		
PF-36-4	SQUARE (750 X 500 MM)	15	PCS		10	5		
PF-37	I-TYPE SQUARE	15	PCS		10	5		
PF-38	CALIPERS	20	PCS		10	10		
PF-39	GATE VALVE	6	PCS		4	2		
PF-40	GLOVE VALVE	6	PCS		4	2		
PF-41	BUTTERFLY VALVE	4	PCS		2	2		
PF-42-1	SLIP ON FLANGE (4")	30	PCS		20	10		
PF-42-2	SLIP ON FLANGE (3")	15	PCS		10	5		
PF-43-1	WELDING NECK FLANGE (4")	30	PCS		20	10		
PF-43-2	WELDING NECK FLANGE (3")	15	PCS		10	5		
PF-44	TEE (STRAIGHT)	21	PCS		16	5		
PF-45	TEE (REDUCER)	21	PCS		16	5		
PF-46-1	CONCENTRIC REDUCER (4" X 3")	21	PCS		16	5		
PF-46-2	CONCENTRIC REDUCER (4" X 2")	15	PCS		10	5		
PF-47-1	EXCENTRIC REDUCER (4" X 3")	21	PCS		16	5		
PF-47-2	EXCENTRIC REDUCER (4" X 2")	15	PCS		10	5		
PF-48-1	SHORT RADIUS ELBOW (4" X 90°)	30	PCS		20	10		
PF-48-2	SHORT RADIUS ELBOW (4" X 45°)	30	PCS		20	10		
PF-49-1	LONG RADIUS ELBOW (4" X 90°)	30	PCS		20	10		
PF-49-2	LONG RADIUS ELBOW (4" X 45°)	30	PCS		20	10		
PF-50	SAFETY GOGGLS	45	PCS		25	20		
PF-51	WELDING GOGGLES	40	PCS		20	20		
PF-52	WELDING MASK	10	PCS		5	5		
PF-53	WRAP AROUND	30	PCS		20	10		
PF-54	EDUCATIONAL VIDEO TAPES	2	SET		1	1		

AUTOMOTIVE REPAIR AND SERVICE

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
AS-1-1	GASOLINE ENGINE TRAINER (4 CYL.)	5	SET	2	3			
AS-1-2	GASOLINE ENGINE TRAINER (6 CYL.)	4	SET	2	2			
AS-2-1	DIESEL ENGINE TRAINER (4 CYL.)	3	SET	1	2			
AS-2-2	DIESEL ENGINE TRAINER (6 CYL.)	3	SET	1	2			
AS-3-1	MOTORCYCLE ENGINE TRAINER (2 STROKE, 125CC)	4	SET	2	2			
AS-3-2	MOTORCYCLE ENGINE TRAINER (2 STROKE, 150CC)	2	SET	1	1			
AS-3-3	MOTORCYCLE ENGINE TRAINER (2 STROKE, 100CC)	4	SET	2	2			
AS-3-4	MOTORCYCLE ENGINE TRAINER (4 STROKE)	4	SET	2	2			
AS-4-1	BOAT ENGINE TRAINER (GASOLINE)	4	SET	2	2			
AS-4-2	BOAT ENGINE TRAINER (DIESEL)	4	SET	2	2			
AS- 5	HAND TRACTOR ENGINE TRAINER	2	SET		2			
AS- 6	CUT-AWAY MODEL (GASOLINE)	2	SET	1	1			
AS- 7	CUT-AWAY MODEL (DIESEL)	2	SET	1	1			
AS- 8	BRAKE TESTER	2	SET	1	1			
AS- 9	HEADLIGHT TESTER	2	SET	1	1			
AS- 10	THERMOSTAT TESTER	2	SET	1	1			
AS- 11	VALVE SPRING TESTER	2	SET	1	1			
AS- 12	ENGINE SCOPE	2	SET	1	1			
AS- 13	COMPRESSION GAUGE FOR GASOLINE ENGINE	2	SET	1	1			
AS- 14	CAMBER-CASTER-KINGPIN GAUGE	1	SET		1			
AS- 15	TUNE UP TESTER	2	PCS	1	1			
AS- 16	CARBURETOR BALANCER	2	SET	1	1			
AS- 17	ELECTRICAL COMPONENT TESTER	1	SET		1			
AS- 18	NOZZLE TESTER	3	SET	1	2			
AS- 19	TIMING LIGHT	4	SET	2	2			
AS- 20	INSIDE MICROMETER	6	SET	3	3			
AS-21-1	OUTSIDE MICROMETER (MM SCALE)	10	PCS	5	5			
AS-21-2	OUTSIDE MICROMETER (INCH SCALE)	6	PCS	2	4			
AS- 22	BRAKE DRUM GAUGE	2	SET	1	1			
AS- 23	DIAL GAUGE	4	SET	2	2			
AS- 24	FEELER GAUGE	10	SET	5	5			
AS-25-1	HYDRAULIC GARAGE JACK (1.5 TON)	4	PCS	1	3			
AS-25-2	HYDRAULIC GARAGE JACK (6 TON)	2	PCS	1	1			
AS- 26	AUTO LIFT	1	SET		1			
AS- 27	PORTABLE CRANE	1	SET		1			

AUTOMOTIVE REPAIR AND SERVICE

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
AS- 28	HYDRAULIC PRESS	2	SET	1	1			
AS- 29	TIRE CHANGER	2	SET	1	1			
AS- 30	WHEEL BALANCER	2	SET		2			
AS- 31	BATTERY QUICK CHARGER	4	SET	2	2			
AS- 32	NOZZLE CLEANING KIT	2	SET		2			
AS- 33	SPARK PLUG CLEANER	2	SET	1	1			
AS- 34	PEDESTAL GRINDING MACHINE	1	SET		1			
AS- 35	BENCH DRILLING MACHINE	1	SET		1			
AS- 36	ELECTRIC DRILL	1	SET		1			
AS- 37	BODY-REPAIR TOOLS SET	1	SET		1			
AS- 38	SPRAY GUN	5	SET		5			
AS- 39	BRAKE LINING RIVETTER	2	SET	1	1			
AS- 40	AIR IMPACT WRENCH SET	1	SET		1			
AS- 41	TUBE FLARING AND CUTTING TOOL	1	SET		1			
AS- 42	VERNIER CALIPER	10	PCS		10			
AS- 43	TAPS AND DIES SET	4	SET		4			
AS- 44	SOCKET WRENCH SET	40	SET	20	20			
AS- 45	TORQUE WRENCH SET	8	SET	4	4			
AS- 46	HOSE CLIPPER	8	SET	4	4			
AS- 47	HAMMER	4	PCS		4			
AS- 48	CADDY TOOL STAND	20	SET	10	10			
AS- 49	PARTS WASHING STAND	10	SET		10			
AS- 50	EDUCATIONAL VIDEO TAPES	2	SET	1	1			

FURNITURES

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
FU- 1	WOOD LATHE	2	SET	2				
FU- 2	SURFACE PLANER	1	SET	1				
FU- 3	AUTOMATIC ROUND-END TENONER	1	SET	1				
FU- 4	AUTOMATIC SLOT MORTISER	1	SET	1				
FU- 5	HOLLOW CHISEL MORTISER	1	UNIT	1				
FU- 6	THICKNESS PLANER	1	UNIT	1				
FU- 7	BAND SAW	1	UNIT	1				
FU- 8	RADIAL ARM SAW	1	SET	1				
FU- 9	RIPPER	1	UNIT	1				
FU-10	BORING MACHINE	1	UNIT	1				
FU-11	SPINDLE SHAPER	1	UNIT	1				
FU-12	PORTABLE BELT SANDER	5	SET	5				
FU-13	DISK SANDER AND POLISHER	5	SET	5				
FU-14	CIRCULAR SAW	2	SET	2				
FU-15	ELECTRIC JIG SAW	2	SET	2				
FU-16	ELECTRIC DRILL	2	SET	2				
FU-17	RECIPRO SAW	2	SET	2				
FU-18	PORTABLE ROUTER	2	SET	2				
FU-19	PORTABLE PLANER	2	UNIT	2				
FU-20	UNIVERSAL CUTTER GRINDER	1	SET	1				
FU-21	CIRCULAR SAW GRINDER	1	SET	1				
FU-22	BAND SAW GRINDER	1	SET	1				
FU-23	WELDING EQUIPMENT FOR BAND SAW	1	SET	1				
FU-24	SAW SETTER	5	PCS	5				
FU-25	CIRCULAR SAW BLADE SET	10	SET	10				
FU-26	DRILL SET	5	SET	5				
FU-27	JIG SAW BLADES	20	SET	20				
FU-28	ROUTER BIT SET	15	SET	15				
FU-29	DRILL BITS	65	PCS	65				
FU-30	SAW DUST EXTRACTOR	2	SET	2				
FU-31	AIR COMPRESSOR	2	UNIT	2				
FU-32	SPRAY GUN	4	SET	4				
FU-33	TOOLS CABINET	4	PCS	4				
FU-34	HAMMER SET	62	PCS	62				
FU-35	CHISEL SET	60	PCS	60				

FURNITURES

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
FU-36	SAW SET	145	PCS	145				
FU-37	PLANE SET	100	PCS	100				
FU-38	RATCHET BRACE	20	PCS	20				
FU-39	NAIL PUNCH	5	SET	5				
FU-40	CENTER PUNCH	10	PCS	10				
FU-41	SCREWDRIVER SET	10	PCS	10				
FU-42	FILE	10	PCS	10				
FU-43	BEVEL SQUARE	20	PCS	20				
FU-44	MARKING GAUGE	20	PCS	20				
FU-45	NAIL PULLER	20	PCS	20				
FU-46	HAND DRILL	10	PCS	10				
FU-47	COMBINATION SQUARE SET	20	PCS	20				
FU-48	CLAMPS	60	PCS	60				
FU-49	OIL STONE	20	PCS	20				
FU-50	MITRE BOX	2	PCS	2				
FU-51	PLIER	20	PCS	20				
FU-52	DOWELING JIG	2	PCS	2				
FU-53	MARKING KNIFE	20	PCS	20				
FU-54	SPOKE SHAVE	20	PCS	20				
FU-55	GLASS CUTTER	5	PCS	5				
FU-56	MORTISE GAUGE	20	PCS	20				
FU-57	MEASURING TAPE	20	PCS	20				
FU-58	WISE FOR WOODWORKING	20	PCS	20				
FU-59	RATCHET SCREWDRIVER	10	PCS	10				
FU-60	ELECTRIC HANDY CARVING MACHINE	5	PCS	5				

INDUSTRIAL ELECTRONIC AND INSTRUMENTATION

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
IE- 1	AIR CONTROL TRAINER	2	SET				1	1
IE- 2	INVERTER MOTOR CONTROL UNIT	10	SET				5	5
IE- 3	PROGRAMABLE CONTROLLER	4	SET				2	2
IE- 4	ROBOTIC TRAINER	2	SET				1	1
IE- 5	POSITIONING CONTROL UNIT	4	SET				2	2
IE- 6	DC SERVO UNIT	10	SET				5	5
IE- 7	ELECTRONIC CIRCUIT TRAINER	8	SET				4	4
IE- 8	LOGIC CIRCUIT TRAINER	20	SET				10	10
IE- 9	PULSE CIRCUIT TRAINER	20	SET				10	10
IE-10	SEMICONDUCTOR TRAINER	20	SET				10	10
IE-11	ELECTRONIC COUNTER TRAINER	20	SET				10	10
IE-12	IC TROUBLESHOOTING KIT	20	SET				10	10
IE-13	OSCILLOSCOPE	20	SET				10	10
IE-14	PULSE GENERATOR	20	SET				10	10
IE-15	FUNCTION GENERATOR	20	SET				10	10
IE-16	DIGITAL MULTIMETER	20	SET				10	10
IE-17	CIRCUIT TESTER	12	SET				6	6
IE-18	DIGITAL TESTER	20	SET				10	10
IE-19	UNIVERSAL COUNTER	12	SET				6	6
IE-20	DC AMPERE METER	40	SET				20	20
IE-21	DC VOLT METER	32	SET				16	16
IE-22	AC VOLT METER	40	SET				20	20
IE-23	AC AMPERE METER	20	SET				10	10
IE-24	POWER METER	24	SET				12	12
IE-25	FREQUENCY COUNTER	20	SET				10	10
IE-26	AC ELECTRONICS VOLT METER	20	SET				10	10
IE-27	MILLI VOLT METER	20	SET				10	10
IE-28	MILLI AMPERE METER	20	SET				10	10
IE-29	LUX METER	8	SET				4	4
IE-30	EMERGENCY SPOTLIGHT	8	SET				4	4
IE-31	PCB ARTWORK TOOLS	40	SET				20	20
IE-32	EXPOSURE UNIT	4	SET				2	2
IE-33	PCB BOARD	4	SET				2	2
IE-34	PARTS	2	SET				1	1
IE-35	PORTABLE ELECTRIC DRILLS	4	SET				2	2

INDUSTRIAL ELECTRONIC AND INSTRUMENTATION

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
IE-36	DC POWER SUPPLY (1)	52	SET				26	26
IE-37	DC POWER SUPPLY (2)	8	SET				4	4
IE-38	DC POWER SUPPLY (3)	20	SET				10	10
IE-39	VARIABLE TRANSFORMER	10	SET				5	5
IE-40	SOLDERING POWER UNIT	40	SET				20	20
IE-41	SOLDER FUME EXTRACTOR	4	SET				2	2
IE-42	TOOL CABINET	20	SET				10	10
IE-43	TOOL SET	40	SET				20	20
IE-44	GALVANO METER	8	SET				4	4
IE-45	STANDARD CELL	2	SET				1	1
IE-46	WHEATSTONE BRIDGE	8	SET				4	4
IE-47	ADJUSTABLE REGISTOR	8	SET				4	4
IE-48	AUTOMATIC LCR METER	12	SET				6	6
IE-49	PERSONAL COMPUTER	6	SET				3	3
IE-50	PRINTER	8	SET				4	4
IE-51	X-Y PLOTTER	4	SET				2	2
IE-52	SOFTWARE	2	SET				1	1
IE-53	MICROCOMPUTER TRAINER	20	SET				10	10
IE-54	LOGIC ANALYZER	4	SET				2	2
IE-55	LOGIC COMPARATOR	16	SET				8	8
IE-56	INCIRCUIT EMULATOR	20	SET				10	10
IE-57	DIGITAL STORAGE SCOPE	4	SET				2	2
IE-58	EPROM PROGRAMMERS	4	SET				2	2
IE-59	EPROM ERASERS	4	SET				2	2
IE-60	EDUCATIONAL VIDEO TAPES	2	SET				1	1

LANGAGE LABORATORY

CODE NO.	DESCRIPTION	TOTAL Q' TY	UNIT	PEKAN BARU	TJ. PINANG	TANGE RANG	PASAR REBO	SINGO SARI
LA-1	LANGUAGE TRAINING SYSTEM	1	SET		1			
LA-2	JAPANESE LANGUAGE TRAINING TAPE	1	SET		1			
LA-3	ENGLISH LANGUAGE TRAINING TAPE	1	SET		1			

Appendix - 8 Layout of Planned Equipment

Fig.1 PEKANBARU VTC

- | | | |
|--------------------------------|-------------------------------------|-------------------------------------|
| MS -1 CENTER LATHE | ME -7 UNIVERSAL MILLING MACHINE | AW -10 SHEARING MACHINE |
| MS -2 CENTER LATHE | ME -8 SHAPING MACHINE | AW -21 SHEET METAL FOLDING MACHINE |
| MS -3 CENTER LATHE | ME -9 COPYING LATHE | AW -22 FLANGING AND BENDING MACHINE |
| MS -4 COLUMN DRILLING MACHINE | ME -10 SURFACE GRINDING MACHINE | AW -24 UNIVERSAL TESTING MACHINE |
| MS -5 RADIAL DRILLING MACHINE | ME -11 CYLINDRICAL GRINDING MACHINE | AW -25 MATERIAL BENDING TESTER |
| MS -6 VERTICAL MILLING MACHINE | | AW -38 WORK BENCH |

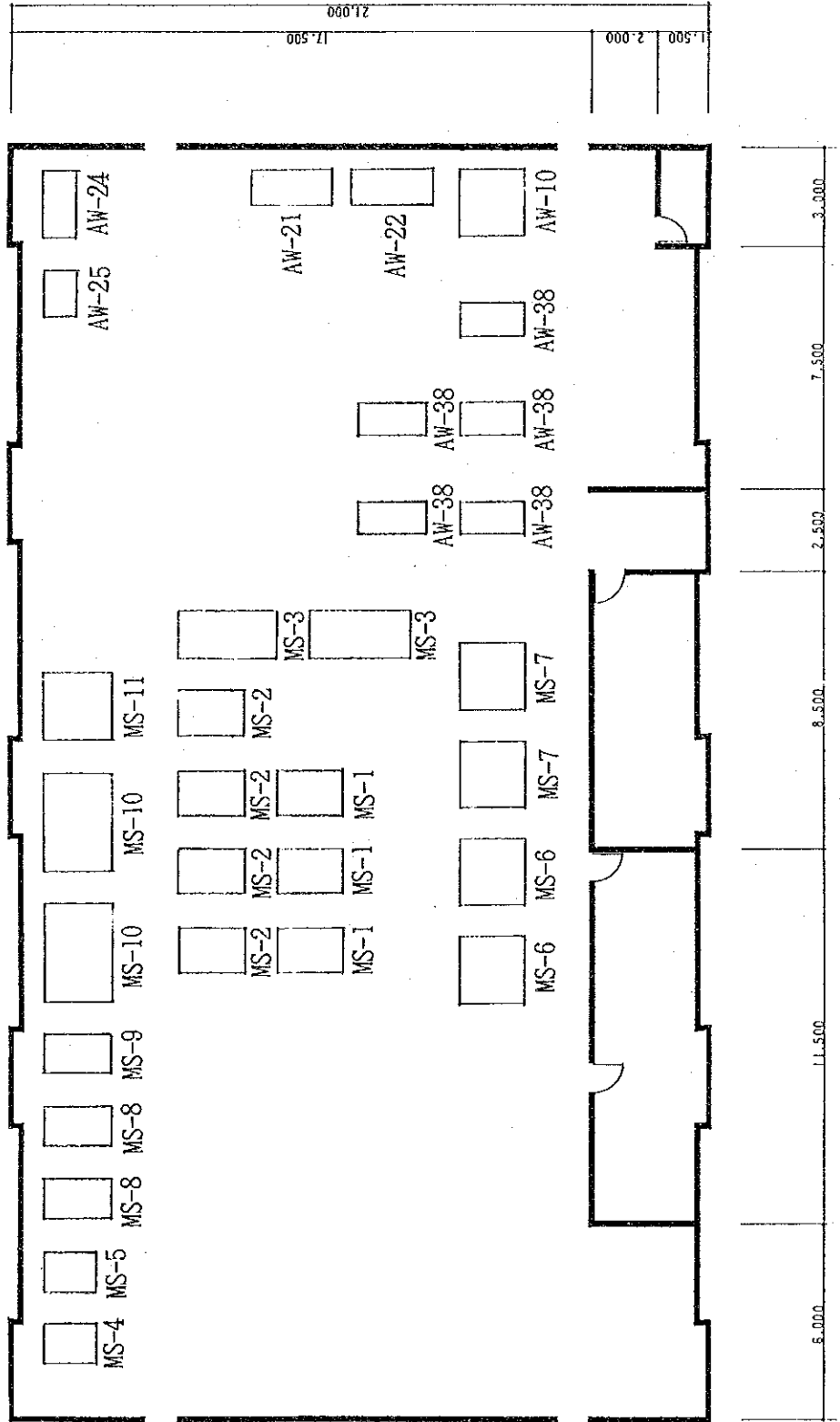
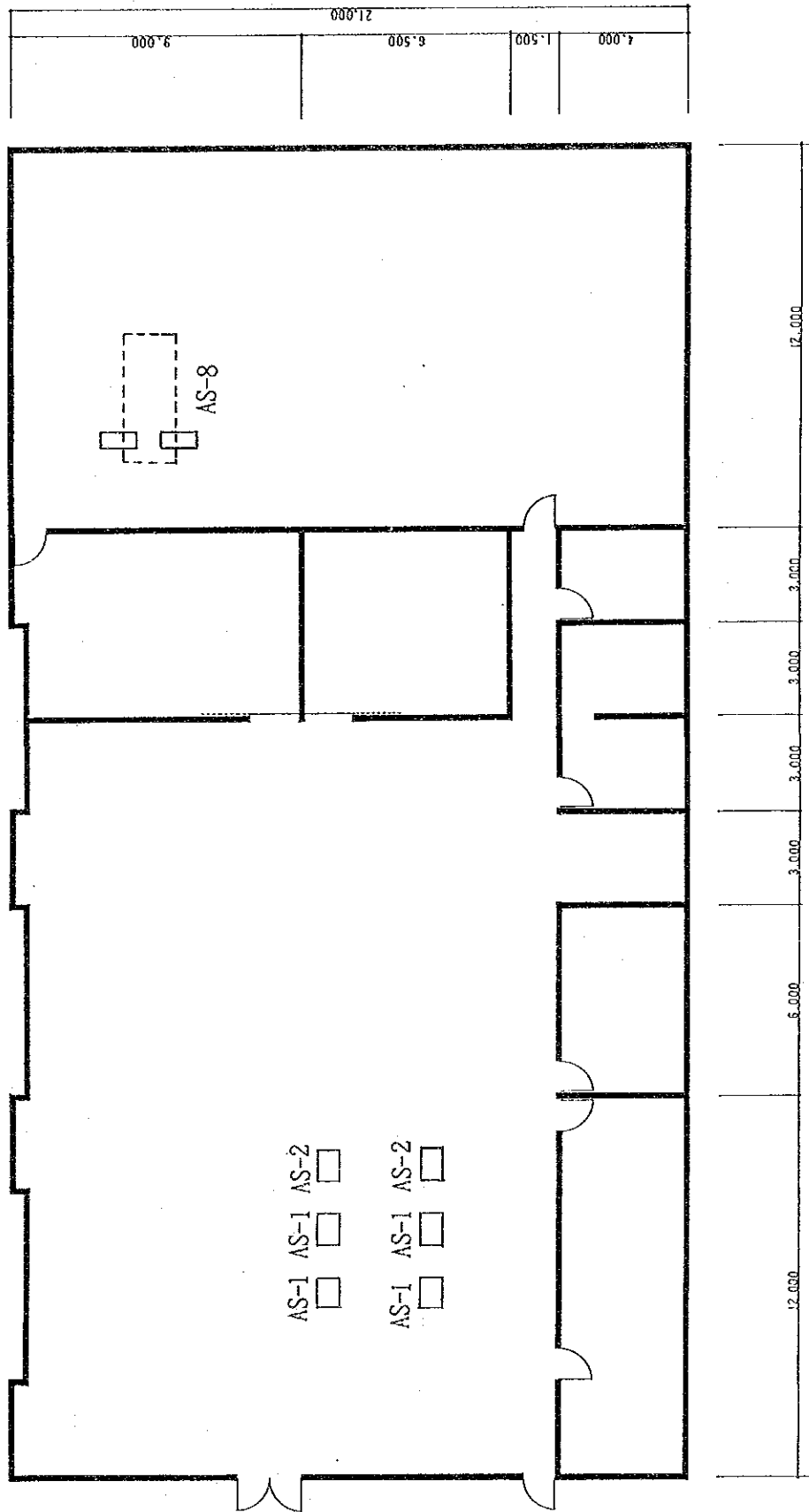


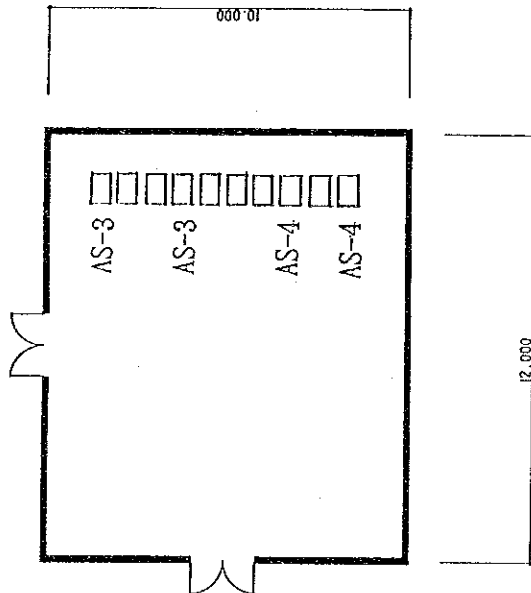
Fig.2 PEKANBARU VTC



AS -1 PETROL ENGINE STAND
 AS -2 DIESEL ENGINE STAND
 AS -8 BRAKE TESTER

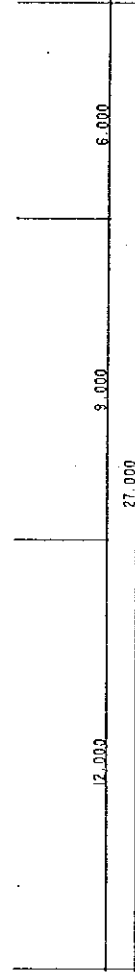
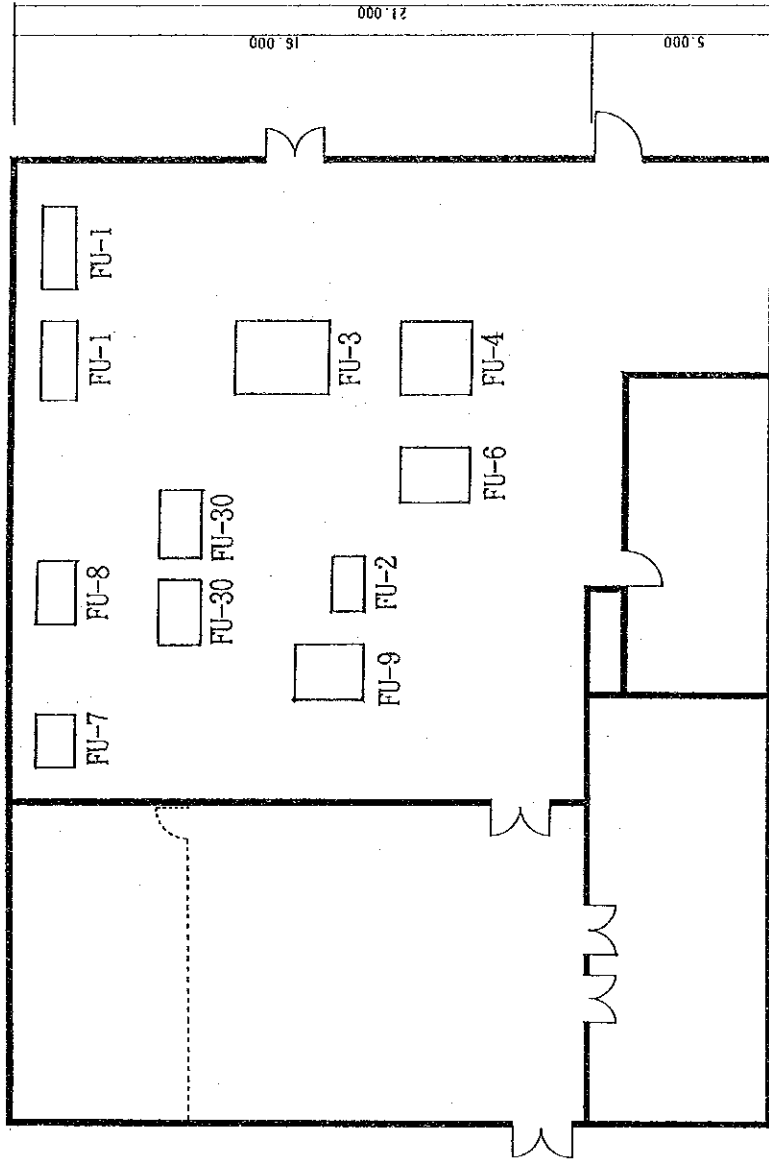
AUTOMOTIVE REPAIR AND SERVICE COURSE

Fig.3 PEKANBARU VTC



AUTOMOTIVE REPAIR AND SERVICE COURSE

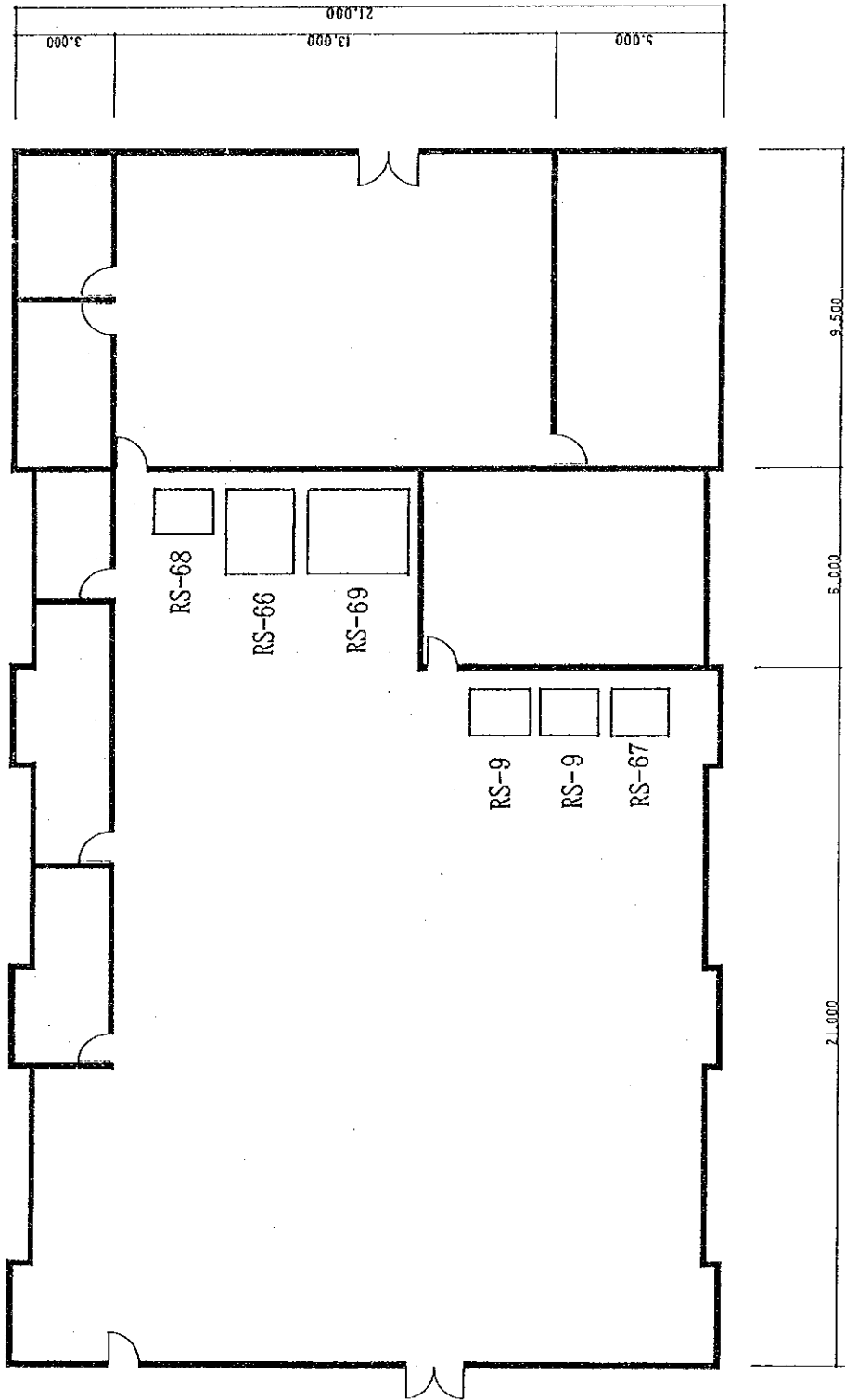
- AS -3 MOTOR CYCLE ENGINE STAND
- AS -4 BOAT DIESEL ENGINE STAND



FURNITURE COURSE

- FU -1 WOOD LATHE
- FU -2 SURFACE PLANER MACHINE
- FU -3 TENONER MACHINE
- FU -4 VERSATILE SLOTEORING MACHINE
- FU -6 THICKNESSER
- FU -7 BAND SAW
- FU -8 RADIAL ARM SAW
- FU -9 RIPPER
- FU -30 SAW DUST EXTRACTOR FANS

Fig.4 PEKANBARU VTC



- RS -9 ABSORPTION REFRIGERATOR DOMESTIC
- RS -66 COMMERCIAL REFRIGERATION TRAINER
- RS -67 INDUSTRIAL REFRIGERATOR TRAINER
- RS -68 REFRIGERATION DIAGNOSTIC CENTER
- RS -69 DOMESTIC REFRIGERATOR TRAINER

REFRIGERATION REPAIR AND SERVICE COURSE

Fig.5 TANJUNGPINANG VTC

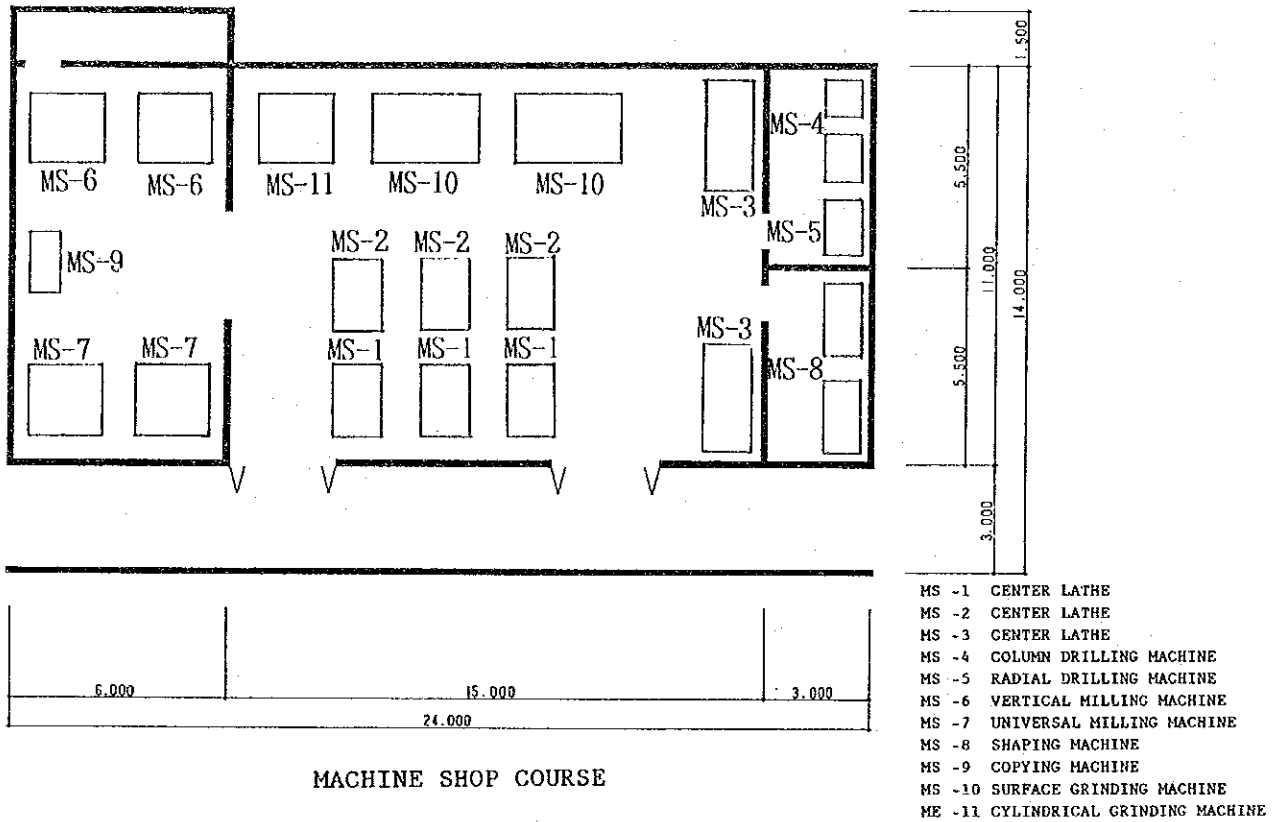
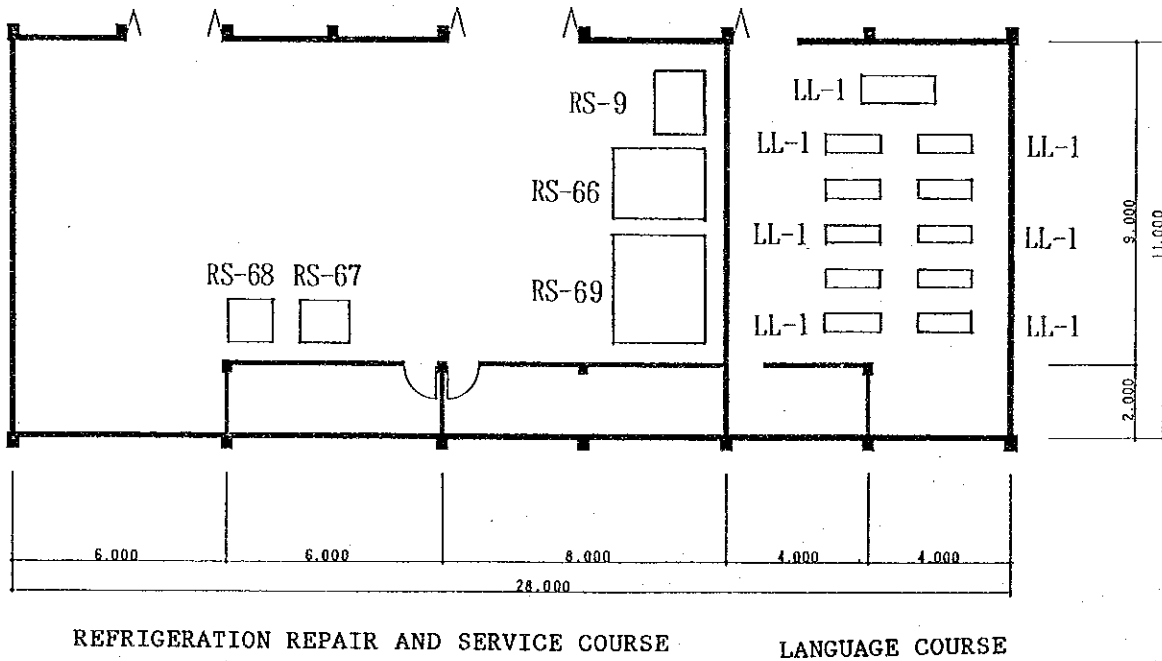


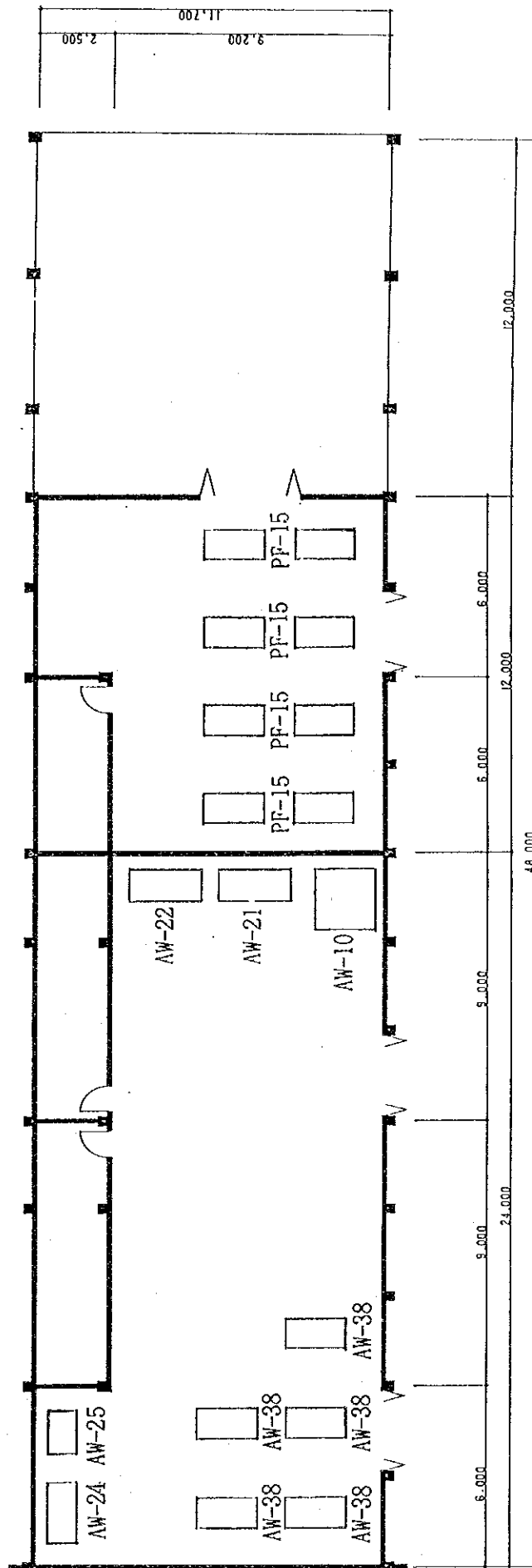
Fig.6 TANJUNGPINANG VTC



- RS - 9 ABSORPTION REFRIGERATOR DOMESTIC
- RS - 66 COMMERCIAL REFRIGERATION TRAINER
- RS - 67 INDUSTRIAL REFRIGERATOR TRAINER
- RS - 68 REFRIGERATION DIAGMATIC CENTER
- RS - 69 DOMESTIC REFRIGERATOR TRAINER

- LL - 1 LANGUAGE LABORATORY EQUIPMENT

Fig.7 TANJUNGPINANG VTC



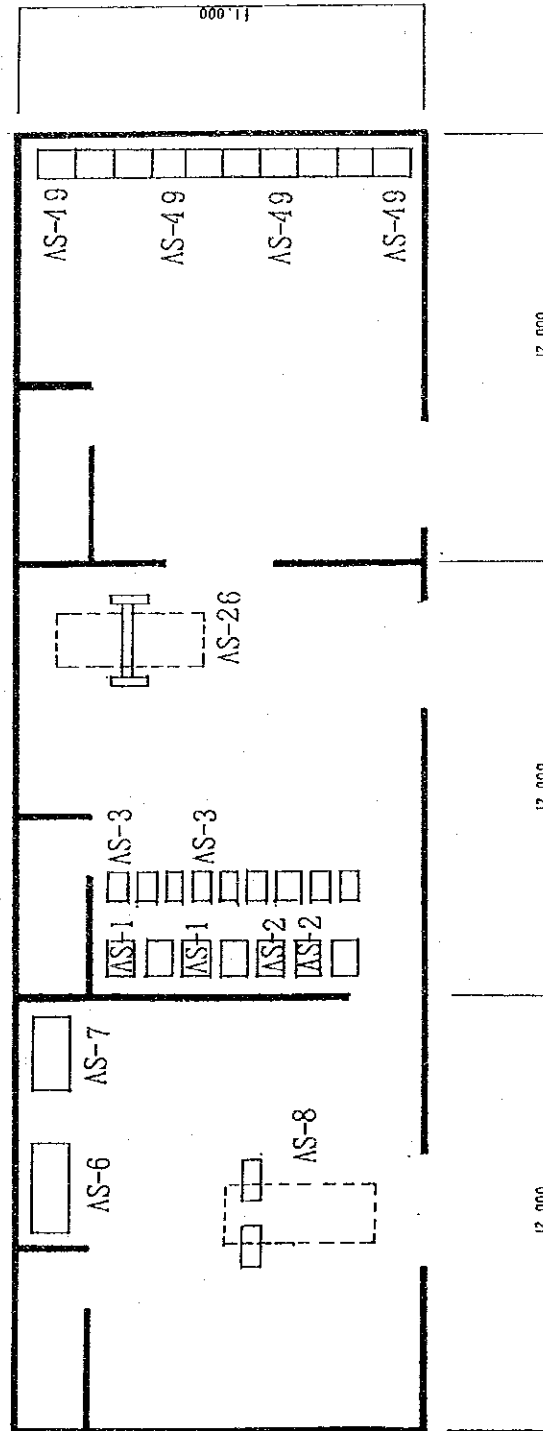
WELDING COURSE

- AW -10 SHEARING MACHINE
- AW -21 SHEET METAL FOLDING MACHINE
- AW -22 FLANGING AND BENDING MACHINE
- AW -24 UNIVERSAL TESTING MACHINE
- AW -25 MATERIAL BENDING TESTER
- AW -38 WORK BENCH

PIPE FITTING COURSE

- PF -15 WORK BENCH

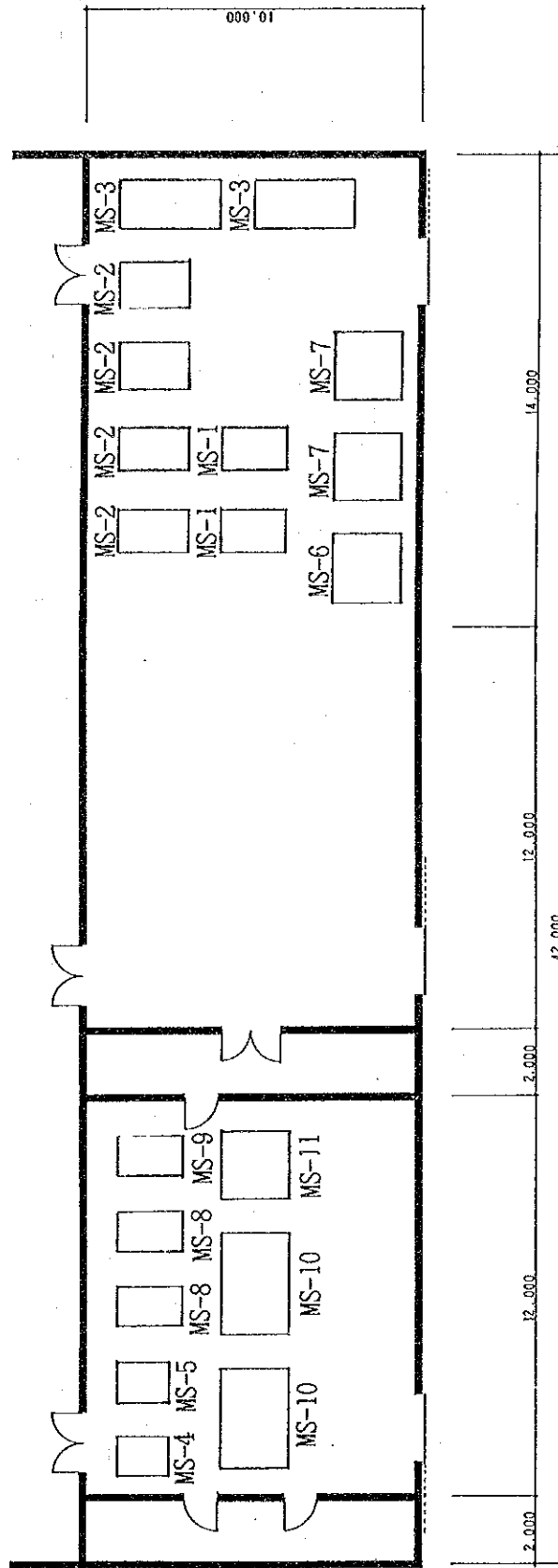
Fig.8 TANJUNGPINANG VTC



- AS -1 PETROL ENGINE STAND
- AS -2 DIESEL ENGINE STAND
- AS -3 MOTOR CYCLE ENGINE STAND
- AS -6 ELECTRONIC INJECTION TUNE UP
- AS -7 FUEL SYSTEM
- AS -8 BRAKE TESTER
- AS -26 AUTO LIFT
- AS -49 WASHES BASIN

AUTOMOTIVE REPAIR AND SERVICE COURSE

Fig.9 TANGERANG VTC

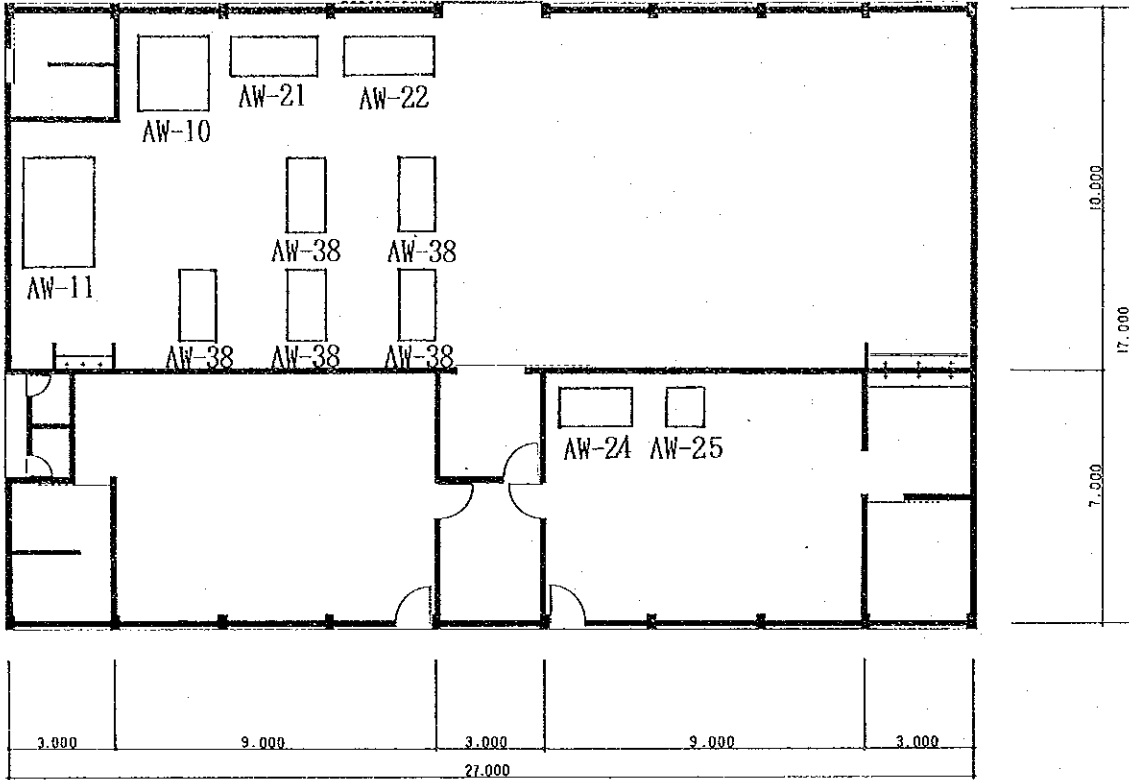


MACHINE SHOP COURSE

MACHINE SHOP COURSE

- MS -1 CENTER LATHE
- MS -2 CENTER LATHE
- MS -3 CENTER LATHE
- MS -4 COLUMN DRILLING MACHINE
- MS -5 RADIAL DRILLING MACHINE
- MS -6 VERTICAL MILLING MACHINE
- MS -7 UNIVERSAL MILLING MACHINE
- MS -8 SHAPING MACHINE
- MS -9 COPIING MACHINE
- MS -10 SURFACE GRINDING MACHINE
- ME -11 CYLINDRICAL GRINDING MACHINE

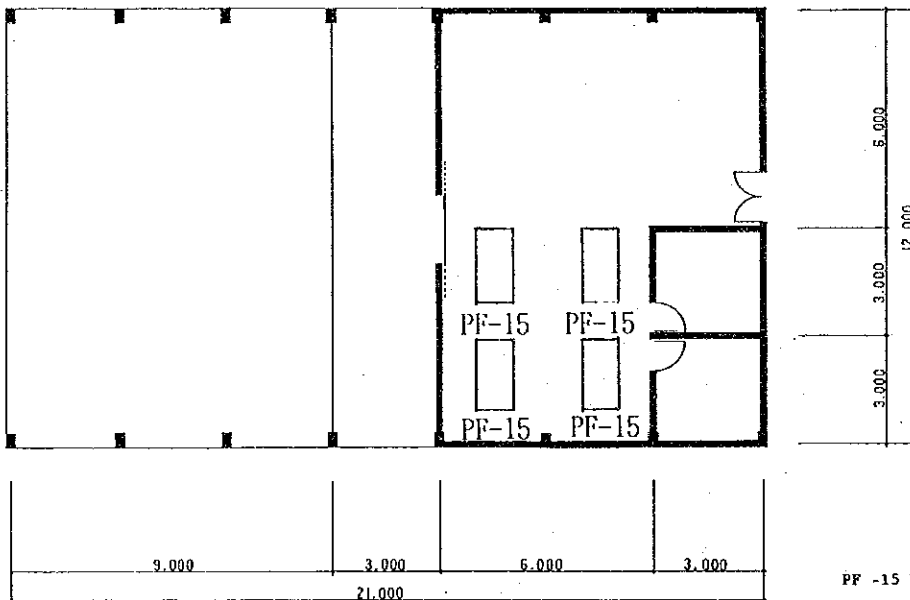
Fig.10 TANGERANG VTC



WELDING COURSE

- AW -10 SHEARING MACHINE
- AW -11 PLATE BENDING MACHINE
- AW -21 SHEET METAL FOLDING MACHINE
- AW -22 FLANGING AND BENDING MACHINE
- AW -24 UNIVERSAL TESTING MACHINE
- AW -25 MATERIAL BENDING TESTER
- AW -38 WORK BENCH

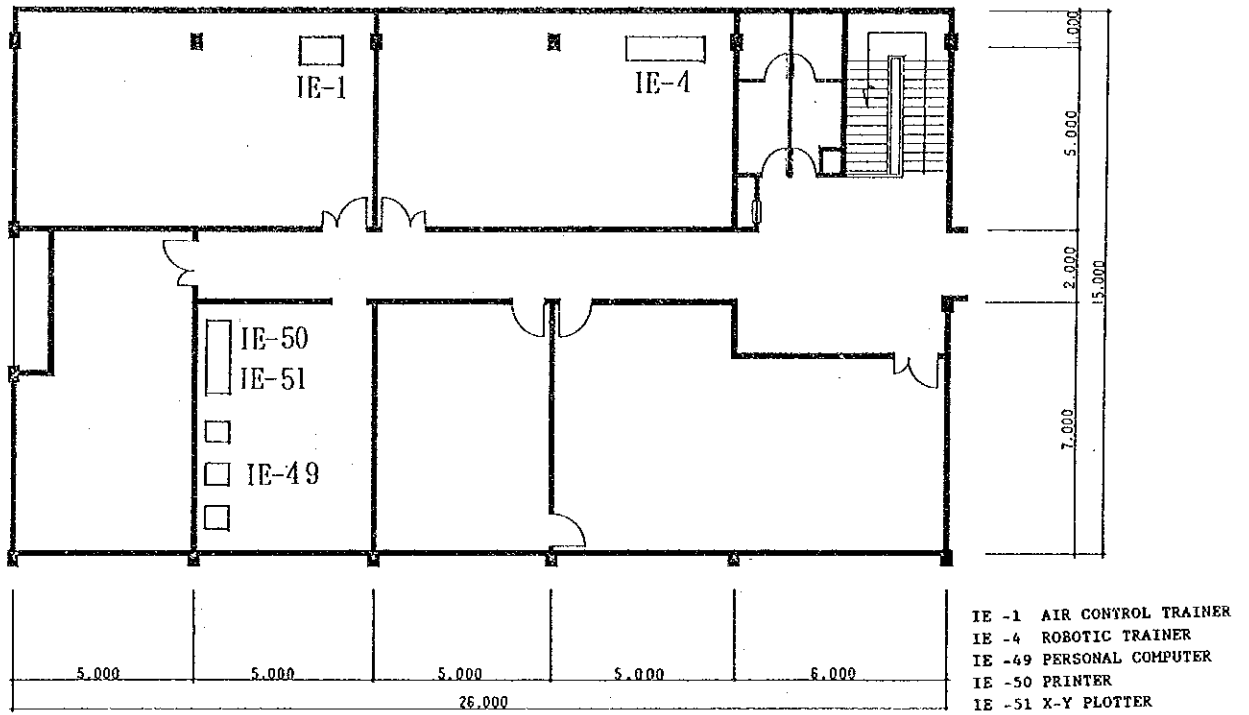
Fig.11 TANGERANG VTC



PIPE FITTING COURSE

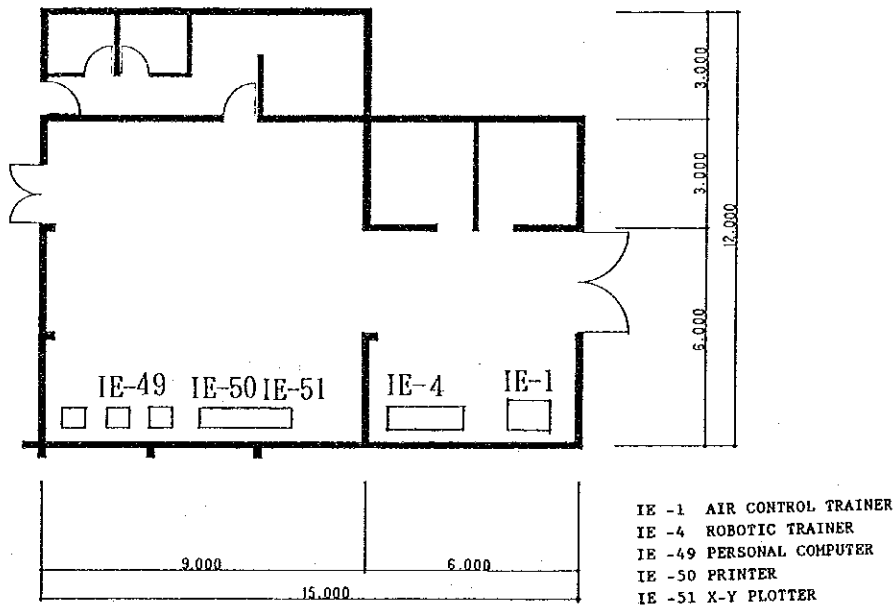
- PF -15 WORK BENCH

Fig. 12 PASAR REBO VTC



INDUSTRIAL ELECTRONIC AND INSTRUMENTATION COURSE

Fig.13 SINGOSARI VTC



INDUSTRIAL ELECTRONIC AND INSTRUMENTATION COURSE

Appendix - 9 Curriculums of I.E. Course on CEVEST

		Practice
3.1	Electrical engineering	100h I-I 0
3.2	Electronic engineering	100h I-I 0
3.3	Electro-magnetic Theory	5h I-I 0
3.4	Electrical and electronic parts	8h I-I 0
3.5	Electrical and electronic drawing	70h I-I 60h
3.6	Electrical measurement	320h I-I 260h
3.7	Electrical and electronic circuit	500h I-I ~2III 340h
3.8	Electronic instrument	250h II ~III 180h
3.9	Electrical instrument	270h II ~III 190h
3.10	Digital engineering	390h II ~III 250h
3.11	Sequence control	350h IV ~V 200h
3.12	Automatic control	210h IV ~V 130h
3.13	Computer software	470h IV ~V 280h
3.14	Computer hardware	370h III ~V 280h
3.15	Power - electronics	220h IV 120h
3.16	Interface	230h VI 120h
3.17	Hydraulic and pneumatic technology	110h V 50h
3.18	Industrial engineering	60h V 0
3.19	Opt - electronics	130h V ~VI 70h
3.20	Computer communication	120h VI 60h
3.21	On the job training	260h VI 260h
3.22	Graduation study	60h VI 60h

Supporting/special sheet

4.1	Mathematics	180h I ~IV
4.2	Physics	100h I, III
4.3	English	180h I ~IV
4.4	Industrial control	80h IV
4.5	Safety engineering	40h II
4.7	Tutorial	30h II, IV, VI

JICA