

Rencana Anggaran Biaya

Jam Stadion Diameter 250 CM

Dear All,

Berikut adalah gambaran item RAB dan spesifikasi Jam Stadion – Jam ukuran besar dengan diameter 2,5 meter, available pemasangan di Banten, Palembang, Jakarta, Yogyakarta, Surabaya, dan kota lain di seluruh Indonesia

No.	Descriptions	Model	Qty	Rp/unit	Total Rp
a	MOVEMENT	GFA40LHB	1	call	call
	Specifications: • Movement Analog clock for dial diameter 2500mm • Intelligent clock movement 4M for dial from 2M to 4M 230V/AC • Hand position control with GPS antenna • LC (long canon) 200mm for dial from 2M to 4M				
b	GPS Time Receive Antenna Specifications: • 12 channel receivers • Data standard: NMEA 0183 • Data transmission: RS 485, 4800 rate, 1 stop bit, no parity • Power supply 5-15V/DC • Operating temperature -30~70 °C • Ingress Protection: IP67		1	call	call
c	Hour & Minute hands Specifications: • TWO hands, with Metal material • Pair Roman hands for dial diameter 2,5M • Type A1 Model 2M 40 to 2M 49 (or EB series)		1	call	call

Jam Stadion – Jam Scoring Board

d	Electrical Panel movement analog clock Specifications: • Metal material indoor/outdoor • Size 60x40x20 CM • Dark White color • Voltage 220V/AC – 240V/AC	1	call	call
e	Installation Scope: • Standard indoor/outdoor clock placement • Welding process • Clock Installation and Time synchronization	1	call	call
TOTAL NET IN RUPIAH				call
Note: 1. Berat barang 60-80Kg 2. Pengiriman 30 hari 3. Warranty / Garansi Mesin Jam 12 bulan 4. Harga Franko JAKARTA, jika dikirim ke luar kota ada biayaacking dan deliverable oleh Jasa titipan barang				

Regards,
GFClock Yasa Persada

ANGGONO BASUKI

Addr: Arden Miller clock tower
Jl. Pejaten Raya 12A Pejaten Barat – Pasar Minggu
Jakarta Selatan 12510 – Telp. +62-21-79170265

Direct Contact: gfclock@yasapersada.com
Hp. +62-818 8020 45 or 0821 146 11732
W/A: 0821-1461 1732



AM400-AF

Japan Movement

Tower clocks are available backlighted, halo lighted, or edge lighted with LEDs. Custom designed tower clocks are limited only by your imagination. A wide range of standard dial markings and hands along with special dial lettering and logos are available. Others services including bell tower, tower clock, clock tower, makers of tower clocks, tower clock manufacturers, industrial wall clock also can be provided.

35 years long life
1+ years of Guarantee
Steel Frame with painting/coating
Aluminum Dial (or Acrylic Dial)
Different numerals available
Music is available/changeable
Chiming each hour is enable
Automatic night light on/off system
outside-clock (or inside-clock)
lighting System

Features:

- Microprocessor based open-air tower clock movement
- Suitable for open-air dial diameter from 260 to 400 CM
- Self-setting with master clock upon power recovery from failure
- Controlled & synchronized by master clock
- Operation reservation upon power failure
- High efficiency with low power consumption



Specifications:

Type	: AM400-AF
Movement	: Japan movement 12V step 1/s
Size	: Diameter 400 cm
Frame	: Metal material
Dial	: Acrylic white color, Arabic numeral black color
Hands	: Two hands (hour, minute)
Scale	: Minute bar black color
Illumination	: LED 100.000 hours inside
Synchronized	: Mandatory with master clock
Grade	: IP65

Applications:

Public clocks: square, school, airport, church, mosque
Facade building clocks at supermarket, school, station
Landscape clocks: Floral clock, Flower clock, Park clock
Tower clock, Specialty clock, Outdoor clock, Airport clock, Custom House clock, University clock, College clock, Master Clock System, Analog clock, Giant clock

Distributed by.

PT. YASA PERSADA DEWANTARA

Workshop: ARDEN MILLER clock tower

Jl. Pejaten Raya 12A Pejaten Barat, Pasar Minggu, Jakarta 12510

Direct Calls / WhatsApp: +62 821 146 11732

Projects & Application



Asian Games XVIII Palembang, Jembatan Ampera
Project: Kementrian PUPR, 2 Agustus 2018



Jam Besar diameter 650CM di loby kantor Gubernur
Papua di Jayapura dibangun pada tahun 2014



Menara Masjid Jami Gontor dibangun dengan ketinggian 85 meter, dilengkapi dengan 4 jam analog ukuran besar dengan diameter jam 4 meter di empat sisi arah mata angin.

Peletakan batu pertama dilaksanakan pada tahun 2016 oleh Bapak Presiden RI dan Pimpinan Pondok, peresmian dilakukan oleh Bapak Jusuf Kala, tahun 2018

Dial & Hands



No. 1



No. 2



No. 3



No. 4

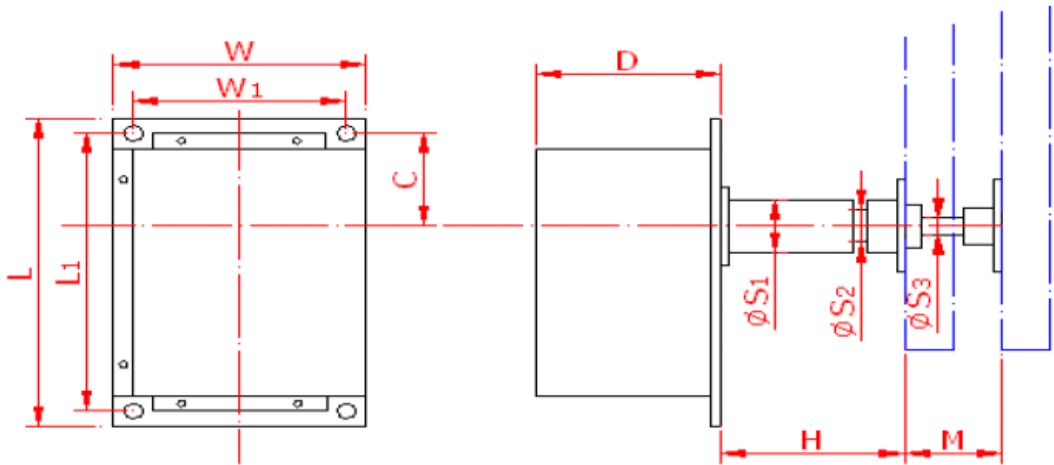
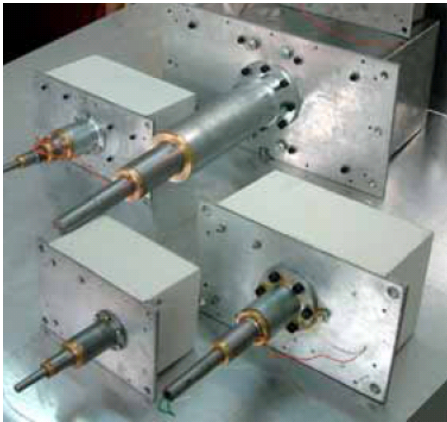


No. 5



No. 6

JAPAN Clock Movement



MOVEMENT	W	W1	L	L1	D	C	S1	S2	S3	H	M
GFA40N	150	130	230	210	100	68	58	33	16	124	65
GFA40L	150	130	230	210	100	68	58	33	16	250	65

- OUTDOOR-USE DESIGN

- Entirely metal fabric from internal parts to outer case
 - Dust-proof, anti-rust, and weather-resistant
- LOW CONSUMPTION

- Lower power consumption by 50%
- HIGH EFFICIENCY

- Cylinder & gears design enables high efficiency with low abrasion
- SELF-SETTING

- Automatically synchronized with master clock
- TIME RESERVATION

- 3 months' operation reservation enables auto correction to master clock's time on power recovery from a mains power failure
- WIRING

- Ordinary double-twisted pair wire
- INTERFACE

- RS485 output & input
- REMOTE OPERATION

- Central supervised and controlled with master clock
 - No operation on movement needed
 - Wiring distance to master clock up to 1200 meter
 - Feedback running status to master clock
- TIME ACCURACY

- 0.3 s/d at 25° (independent)
- OTHERS PARAMETER

- Power supply DC 12V
 - Shafts Hour & minute
 - Working Temp. -30 – 85°
 - Humidity 0 – 95%

GPS Tower Clock System

PROPOSAL

To:
**VALUED CUSTOMER
INDONESIA**

Date: 14 September 2020

Specifications

- Diameter sesuai dengan permintaan Customer
- Single Sides, Double sides, Multi sides
- Illumination at Night with Back Light of Dial (optional)
- Independent Clock / Master Clock System
- Bell Music Hour striking (optional)



GFClock Yasa Persada

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Jl. Warung Jati Barat No.43 Jakarta 12760
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Revision History

Date	Version	Description	Author
11 February 2020	0.1	Initial Draft	Anggono Basuki
14 September 2020	1.0	Review	Anggono Basuki

Distribution Document

This document is to be distributed to:

Name	Title
Anggono Basuki	GFClock Yasa Persada
VALUED CUSTOMER INDONESIA	

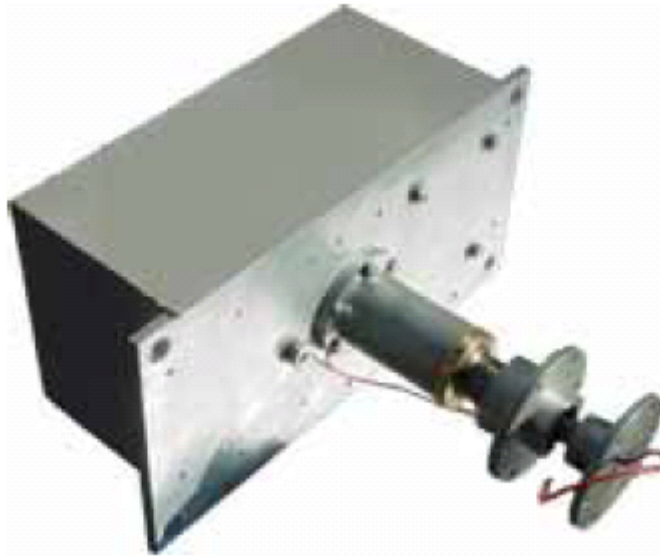
Document Related

- N/A

Clock Movement - Specifications

GFA Series for 1 – 6 Meter Diameter

Two hands: Hour and Minute



Available for 1 - 6 Meter diameter of Dial

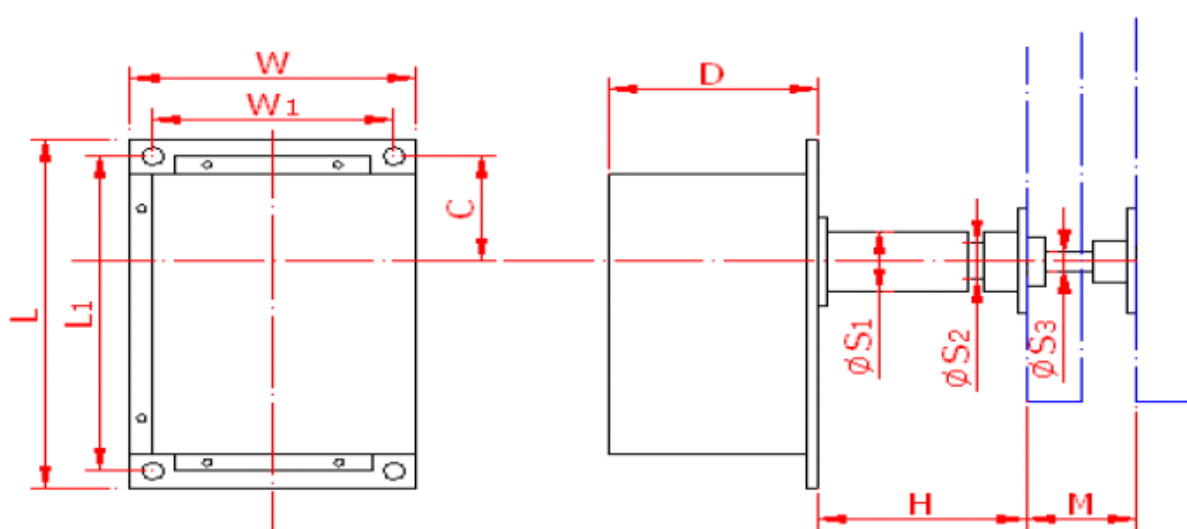
- ☐ Micro-processor based self-setting movement
- ☐ Ideal for open-air tower clock system
- ☐ All metal fabric with stepping motor
- ☐ Remote control enabled
- ☐ Compact design with multiple functions

FEATURES

Microprocessor based open-air tower clock movement
Suitable for open-air dial diameter from 1.2m to 12m
Self-setting with master clock upon power recovery from failure
Controlled & synchronized by master clock or PC connected
Operation reservation upon power failure
High efficiency with low power consumption
Applicable with or w/o master clock and UT tower clock software

OUTDOOR-USE DESIGN	:	- Entirely metal fabric from internal parts to outer case (GFA12 is exceptional with ABS outer case) - Dust-proof, anti-rust, and weather-resistant
LOW CONSUMPTION	:	- Lower power consumption by 50%
HIGH EFFICIENCY	:	- Cylinder & gears design enables high efficiency with low abrasion
SELF-SETTING	:	- Automatically synchronized with master clock
TIME RESERVATION	:	- 3 months' operation reservation enables auto correction to master clock's time on power recovery from a mains power failure
WIRING	:	- Ordinary double-twisted pair wire
INTERFACE	:	- RS485 output & input
REMOTE OPERATION	:	- Central supervised and controlled with master clock or PC - No operation on movement needed - Wiring distance to master clock or PC up to 1200m - Feedback running status to master clock or PC
TIME ACCURACY	:	- 0.3 s/d at 25° (independent)
HANDS ILLUMINATION	:	- Hollow shafts design enables LED
OTHER PARAMETER	:	- Power supply DC 12V - Shafts Hour & minute - Working Temp. -30 – 85° - Humidity 0 – 95%

DIMENSIONS



MODEL	W	W1	L	L1	D	C	S1	S2	S3	H	M
GFA12S	67	-	99	-	50	27	15	7	-	25	15
GFA25N	130	110	200	180	95	60	34	21	11	95	50
GFA25L	130	110	200	180	95	60	34	21	11	230	50
GFA40N	150	130	230	210	100	68	58	33	16	124	65
GFA40L	150	130	230	210	100	68	58	33	16	250	65
GFA60N	200	180	300	280	159	92	64	39	22	154	95
GFA60L	200	180	300	280	159	92	64	39	22	270	95

GFA Series

COMPARISON & SELECTION TABLE OF GFA MOVEMENT

MODEL	Dial Size (cm)	Dial Thickness (mm)	Hour Shaft Length (mm)	Hands Illumination	Operation	Buttons for Adjusting Hands
GFA12SFP	~ 120	~ 10	25	-	w/o Master	* *
GFA12SFS	~ 120	~ 10	25	-	with Master	-
GFA12SFB	~ 120	~ 10	25	-	with or w/o Master	* *
GFA12SHP	~ 120	~ 10	25	Enabled	w/o Master	* *
GFA12SHS	~ 120	~ 10	25	Enabled	with Master	-
GFA12SHB	~ 120	~ 10	25	Enabled	with or w/o Master	* *
GFA25NFP	120 ~ 250	~ 60	90	-	w/o Master	* *
GFA25NFS	120 ~ 250	~ 60	90	-	with Master	-
GFA25NFB	120 ~ 250	~ 60	90	-	with or w/o Master	* *
GFA25NHP	120 ~ 250	~ 60	90	Enabled	w/o Master	* *
GFA25NHS	120 ~ 250	~ 60	90	Enabled	with Master	-
GFA25NHB	120 ~ 250	~ 60	90	Enabled	with or w/o Master	* *
GFA25LFP	120 ~ 250	~ 200	230	-	w/o Master	* *
GFA25LFS	120 ~ 250	~ 200	230	-	with Master	-
GFA25LFB	120 ~ 250	~ 200	230	-	with or w/o Master	* *
GFA40NFP	250 ~ 400	~ 60	115	-	w/o Master	* *
GFA40NFS	250 ~ 400	~ 60	115	-	with Master	-
GFA40NFB	250 ~ 400	~ 60	115	-	with or w/o Master	* *
GFA40NHP	250 ~ 400	~ 60	115	Enabled	w/o Master	* *
GFA40NHS	250 ~ 400	~ 60	115	Enabled	with Master	-
GFA40NHB	250 ~ 400	~ 60	115	Enabled	with or w/o Master	* *
GFA40LFP	250 ~ 400	~ 200	263	-	w/o Master	* *
GFA40LFS	250 ~ 400	~ 200	263	-	with Master	-
GFA40LFB	250 ~ 400	~ 200	263	-	with or w/o Master	* *
GFA60NFP	400 ~ 600	~ 60	154	-	w/o Master	* *
GFA60NFS	400 ~ 600	~ 60	154	-	with Master	-
GFA60NFB	400 ~ 600	~ 60	154	-	with or w/o Master	* *
GFA60NHP	400 ~ 600	~ 60	154	Enabled	w/o Master	* *
GFA60NHS	400 ~ 600	~ 60	154	Enabled	with Master	-
GFA60NHB	400 ~ 600	~ 60	154	Enabled	with or w/o Master	* *
GFA60LFP	400 ~ 600	~ 200	270	-	w/o Master	* *
GFA60LFS	400 ~ 600	~ 200	270	-	with Master	-
GFA60LFB	400 ~ 600	~ 200	270	-	with or w/o Master	* *

Note:

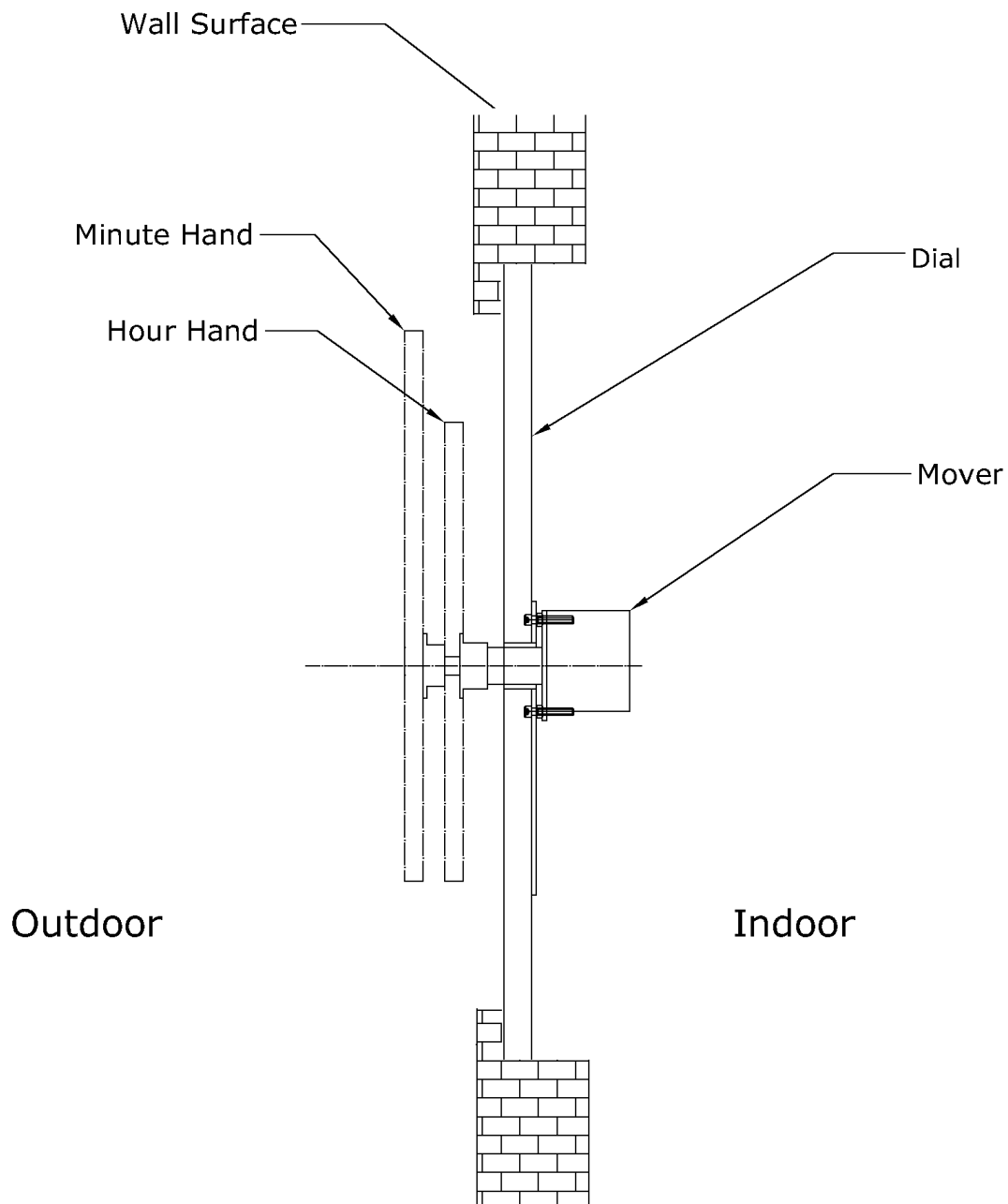
GFA25NFB adalah pilihan yang tepat dalam penawaran ini untuk support spesifikasi yang diinginkan, antara lain:

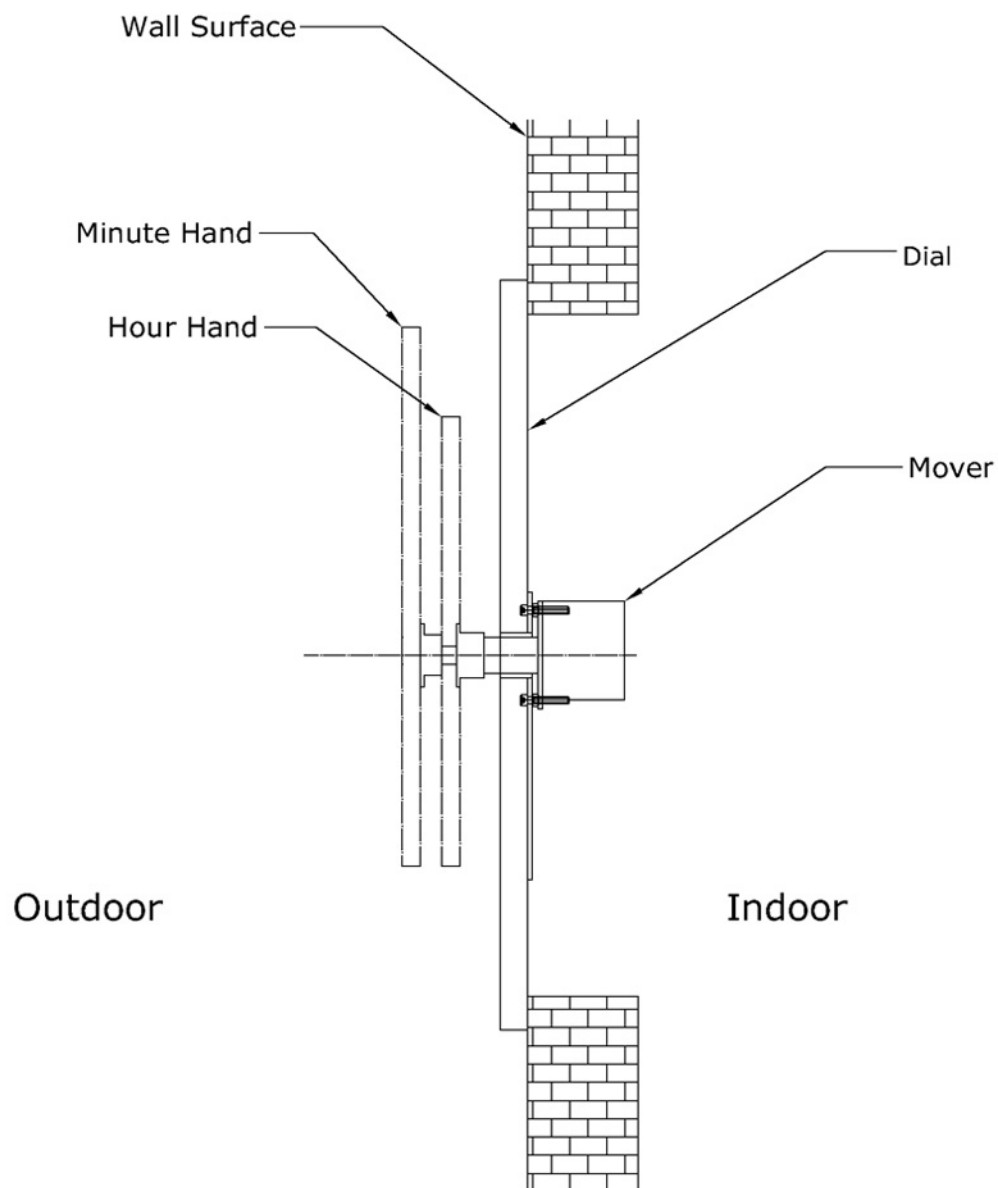
1. Diameter 3.0 meter, and working with Master clock and four slave clock
2. Support illumination at night of Hands

Wiring Installation

GFA Series for Two Hands

Bangunan Menara oleh Pembeli harus dibuat seperti pada gambar dibawah ini:





Tower Clock - Installation

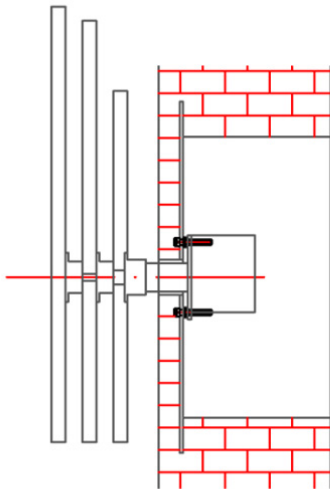


Fig. 1

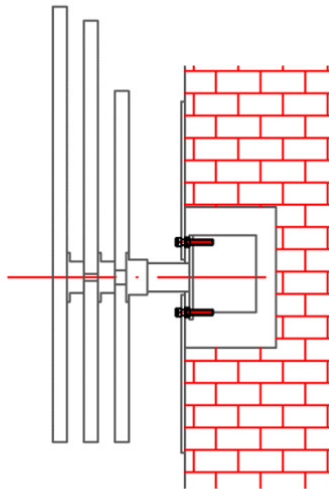


Fig. 2

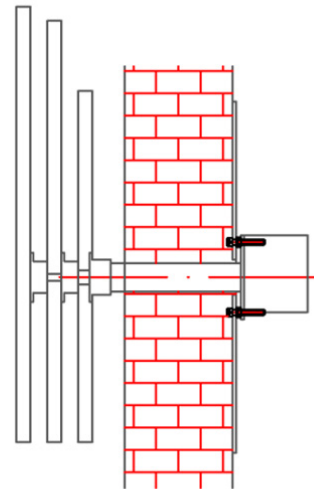


Fig. 3

Remark: in Fig. 3, movement with extended shaft is required

Building Clock - Installation

Master Control & GPS Antenna

Master Control

Digunakan untuk melakukan sinkronisasi waktu dari ke empat face mesin jam sehingga waktu tercatat dari masing-masing mesin jam akan sama, dan mempunyai fungsi RTC = Real Time Clock yang berguna untuk menyimpan informasi waktu jika sumber Listrik dalam keadaan mati (informasi waktu tersebut akan tersimpan selama 6 bulan, setelahnya bisa dilakukan reset ulang untuk kembali dapat menyimpan informasi waktu)

Master Clock ini juga mempunyai fungsi illumination sebagai pengontrol lampu akan menyala pada malam hari, auto correction time jika listrik PLN mati dan akan melakukan recovery waktu secara otomatis kepada masing-masing secondary clocks

Berikut adalah Master Control dalam penawaran ini adalah, sbb:

Master Control / Master Clock



Optional Functions:

1. Master Clock System
2. illumination light at night
3. Auto correction time
4. Control up to 120 meter cable

with Hours Striking Module + Speaker and Amplifier are support Melody/Chime

Master Control jenis ini adalah pilihan yang tepat dalam penawaran ini untuk support spesifikasi yang diinginkan, antara lain:

1. Tower Clock 4 Face dan masing-masing mesin jam akan saling tersinkronisasi waktunya
2. included RTC = Real Time Control (menyimpan informasi waktu sampai dengan 6 bulan selama Listrik Mati, dan bisa di reset kembali)
3. Auto correction Time, jika Listrik Mati akan melakukan perbaikan waktu secara otomatis pada saat Listrik kembali Hidup
4. Support illumination control, dan bisa diset untuk interval waktu yang diinginkan

GPS Antenna



GPS Antenna

Specifications:

- 12 channel receivers
- Data standard: NMEA 0183
- Data transmission: RS 485, 4800 baudrate, 1 stop bit, no parity
- Ingress Protection: IP67, Weatherproof: Yes
- Frequency Range: 1575±5MHz
- Voltage: 3~15V
- Amplifier Gain.: 26dB
- Antenna Gain.: 3.5dBic
- LNA Gain: 28 dB typ.
- Noise Figure: 1.5dB typ.
- Operating Temperature(Deg.C): -45~+85 , Storage Temperature(Deg.C): -50~+90
- Humidity: 100%
- Weight (without cable): 200g (7.5oz)
- Length: 8 m (26 feet), Color: White
- Connector type: BNC connector

Dials & Hands

Berikut ini hanya beberapa contoh Dials dan Hands yang dapat dipilih, namun untuk Penawaran ini dipilih model Dials dan Hands sesuai dengan gambar pada Bab: **Picture References**

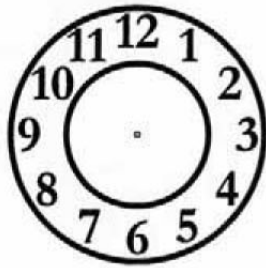
Spesifikasi:

1. Dial diameter sesuai dengan penawaran
2. Dial dapat menyala pada malam hari disorot Lampu dari belakang.
3. Dial Warna dasar Putih, tulisan Angka warna Hitam
4. Dial terbuat dari Metal dan Acrylic
5. Hands (Jarum Menit dan Jarum Jam) dapat menyala di malam hari dengan LED berwarna

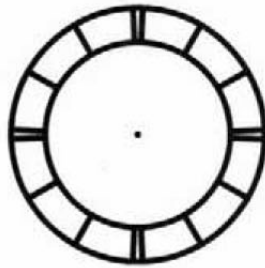
6. Hands Warna Hitam
7. Hands terbuat dari Metal atau Acrylic

GFClock Yasa Persada

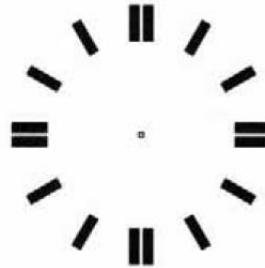
1/3



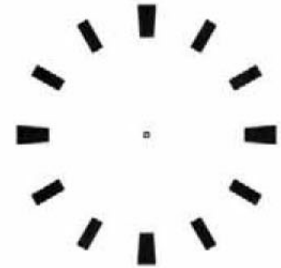
EB-302



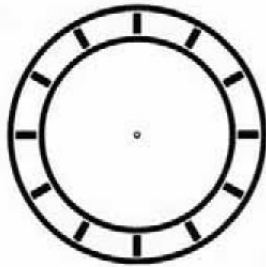
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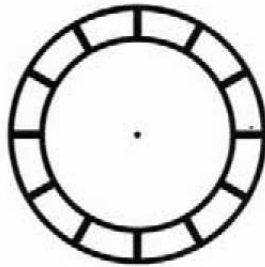
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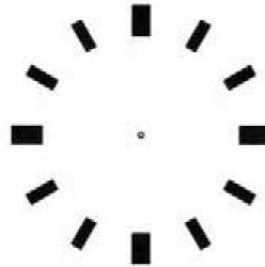
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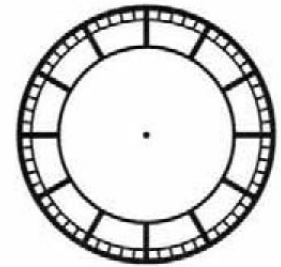
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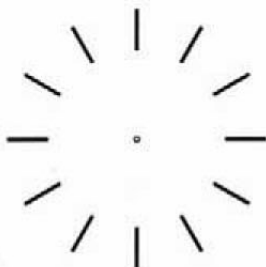
EB-306R



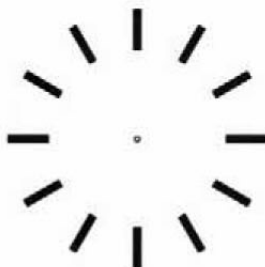
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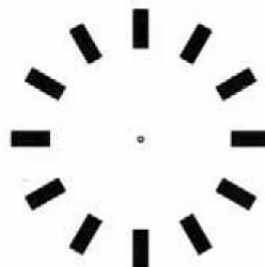
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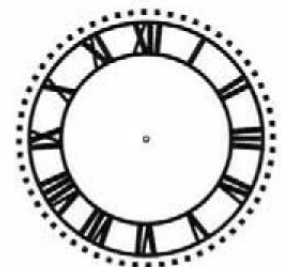
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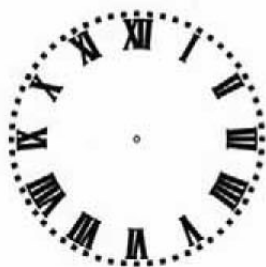
EB-309M



EB-309H



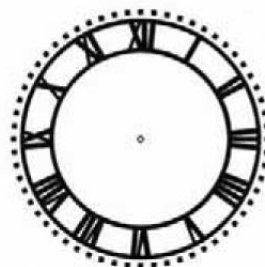
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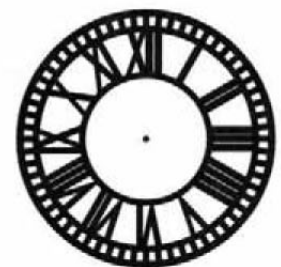
EB-312



EB-312V



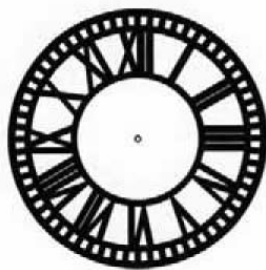
EB-313



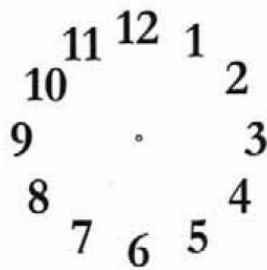
EB-314

GFClock Yasa Persada

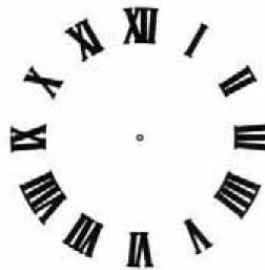
2/3



EB-314R



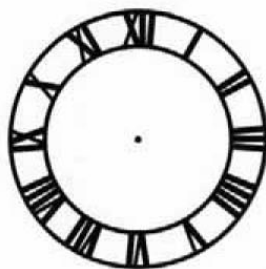
EB-315



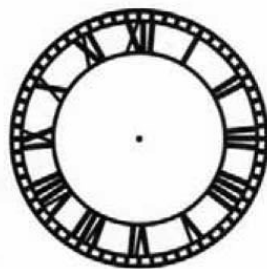
EB-316



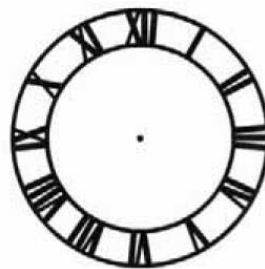
EB-316V



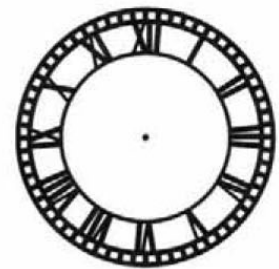
EB-316R



EB-316MR



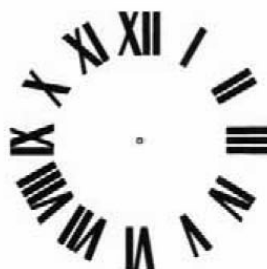
EB-320



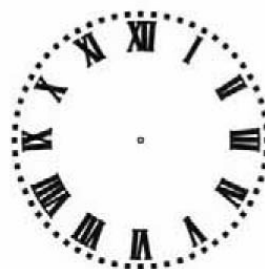
EB-320M



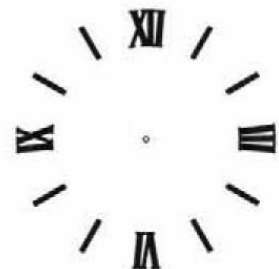
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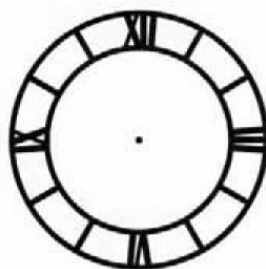
EB-321V



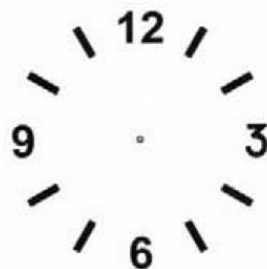
EB-322



EB-323



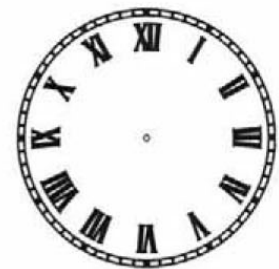
EB-323R



EB-325



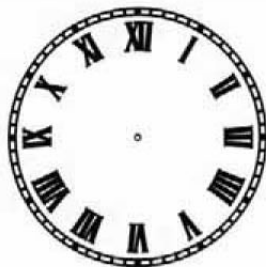
EB-326



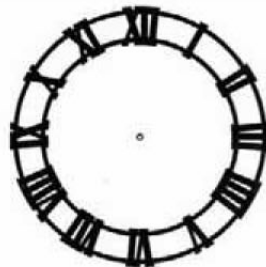
EB-328

GFClock Yasa Persada

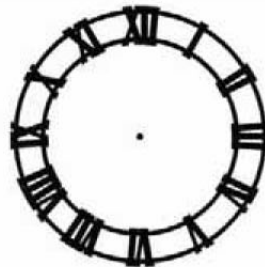
3/3



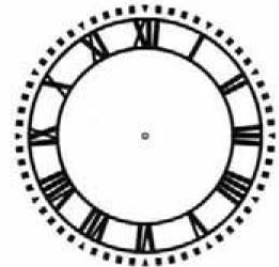
EB-328V



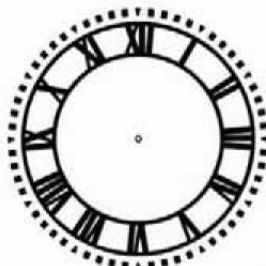
EB-333



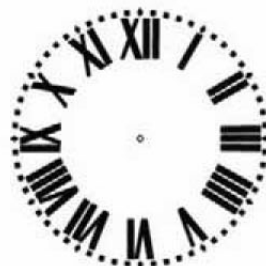
EB-333R



EB-334



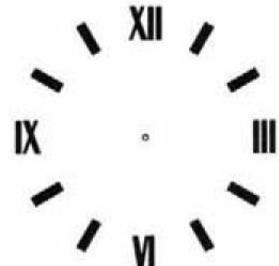
EB-334V



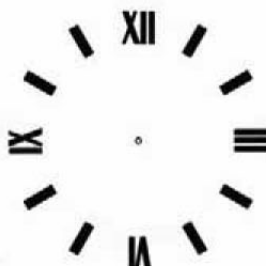
EB-335D



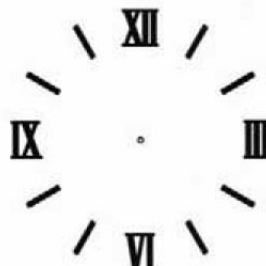
EB-335DV



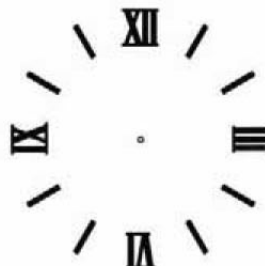
EB-336



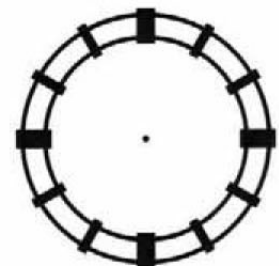
EB-336V



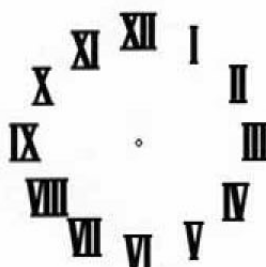
EB-337



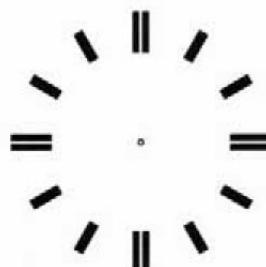
EB-337V



EB-346



EB-347



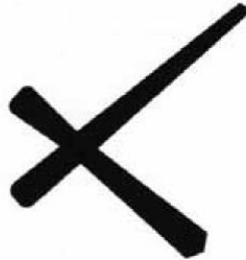
EB-348

GFClock Yasa Persada

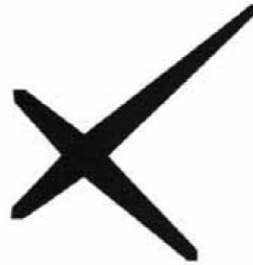
1/3



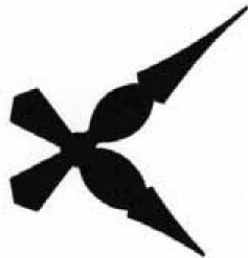
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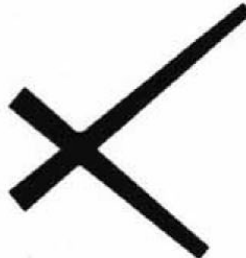
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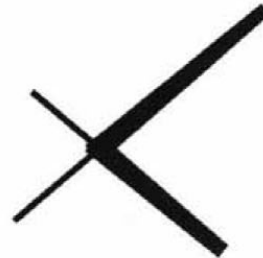
EB-403



EB-404



EB-405



EB-405T



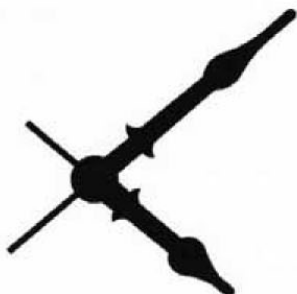
EB-406



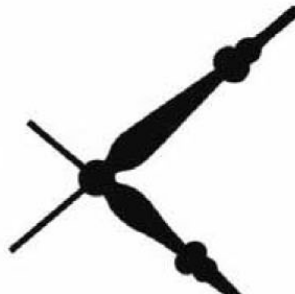
EB-407



EB-408



EB-409



EB-410



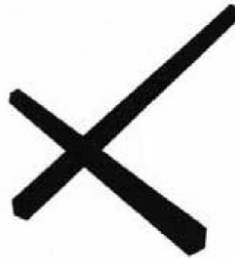
EB-412

GFClock Yasa Persada

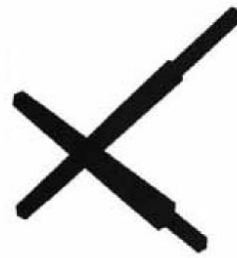
2/3



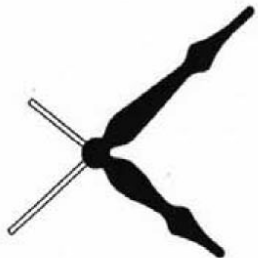
EB-412-H



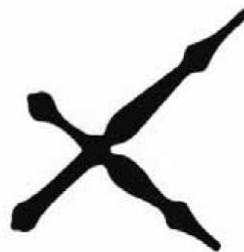
EB-413



EB-414



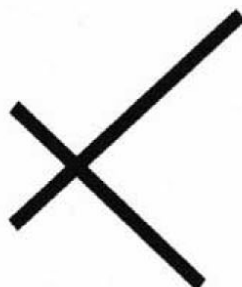
EB-415



EB-416



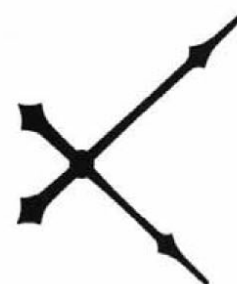
EB-417



EB-418



EB-418-H



EB-419



EB-420

Picture References

Berikut adalah Jenis Dials dan Hands yang dipilih untuk diimplementasikan dalam Tower Clock pada Penawaran ini.



Dial with illumination at Night



BIG Clock Solutions

Berikut adalah contoh gambar Jam Tugu lainnya, bisa dipilih sebagai referensi model dan bentuk yang diinginkan:





Anda bisa melihat beberapa koleksi bentuk jam Tower Clocks, Outdoor Clocks, dan Street Clocks di website kami di <http://gfclock.blogspot.co.id>

Atau kunjungi blog kami di <http://clock-making.blogspot.com>

atau bisa kontak kami secara langsung ke:

GFClock Yasa Persada

Add: Arden Miller clock tower

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W/A: **0821-1461 17 32**