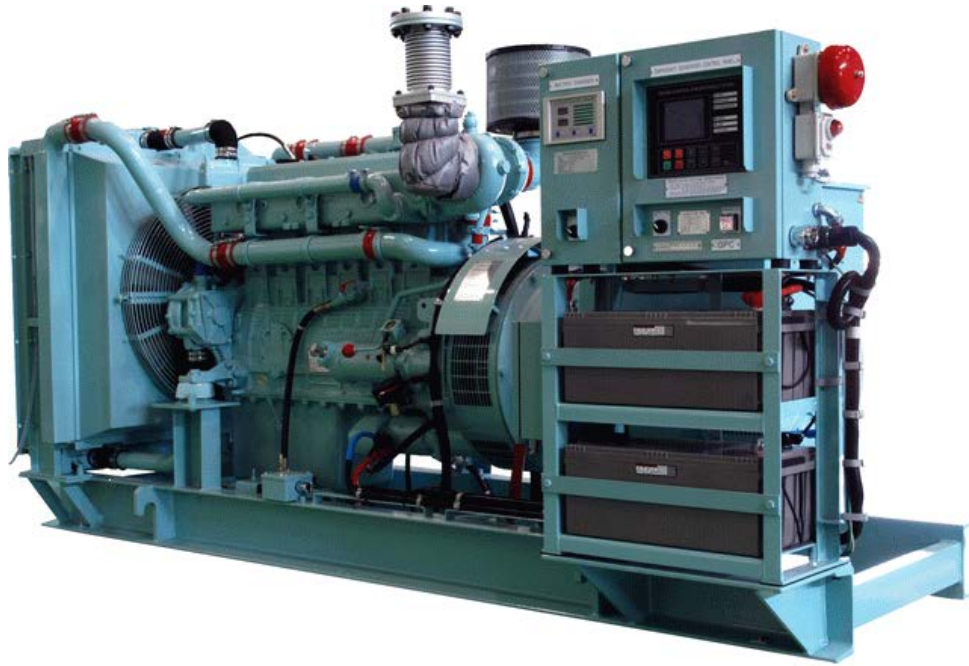


EMERGENCY GENERATOR



GPC

<http://www.gpckorea.com>

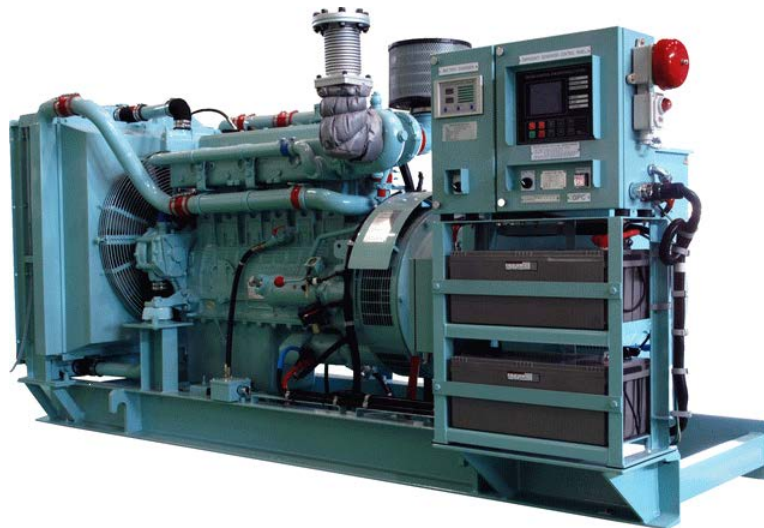
About GPC

Green Power Corporation

Since our establishment in 2002, GPC has worked with endless effort to realize innovations in management to lead the industry with new technologies and products. GPC has become the world's No.1 Emergency Generator manufacturer and demonstrated boundless imagination and technical capability in marine emergency generator sets.

All GPC Members are creating the world's best products and services and are constantly pursuing innovations and challenges with the pride as contributors to industrial development and society.

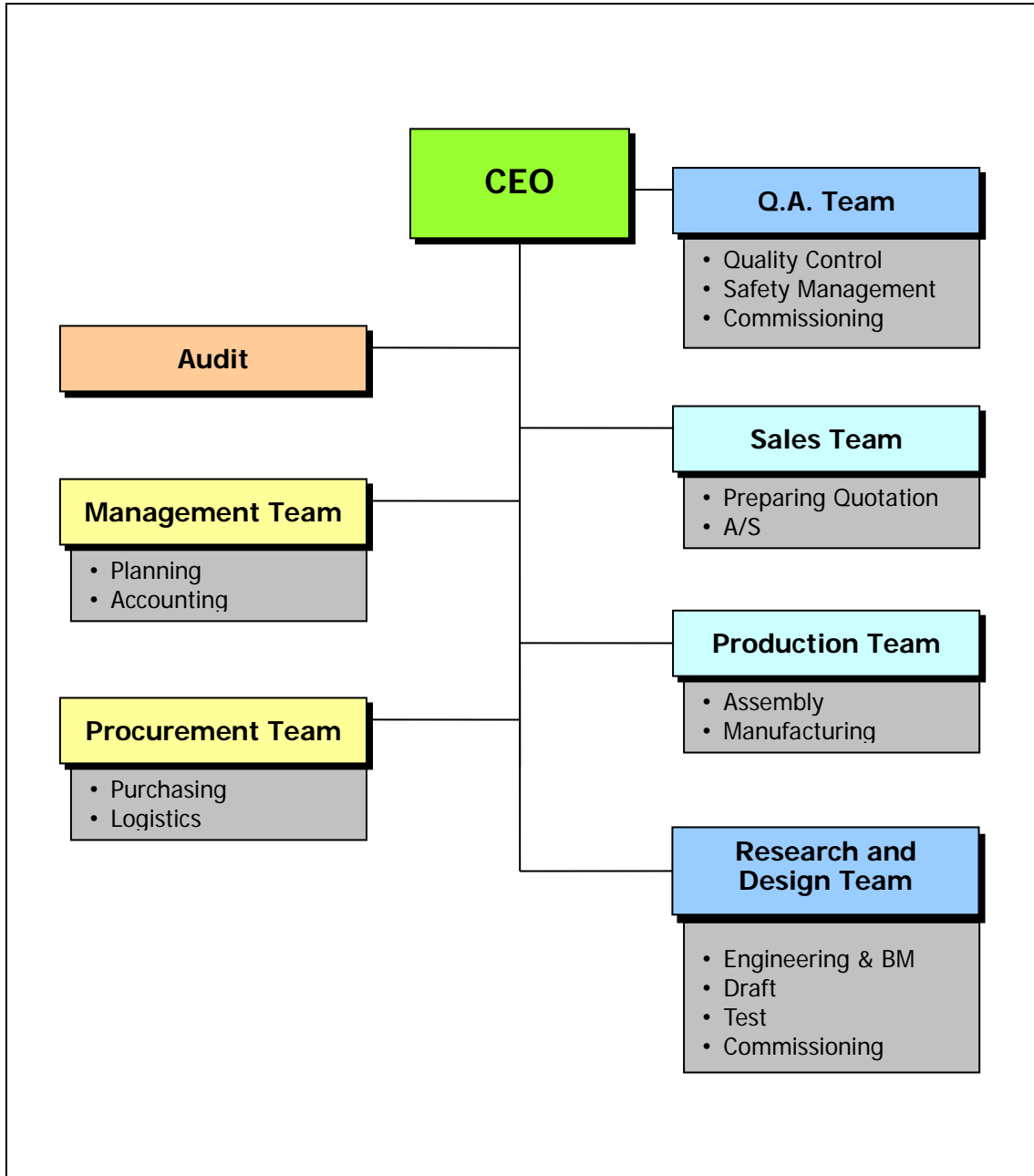
We ask for your continuous support in our efforts to deliver the best technology and products for our customers.



History

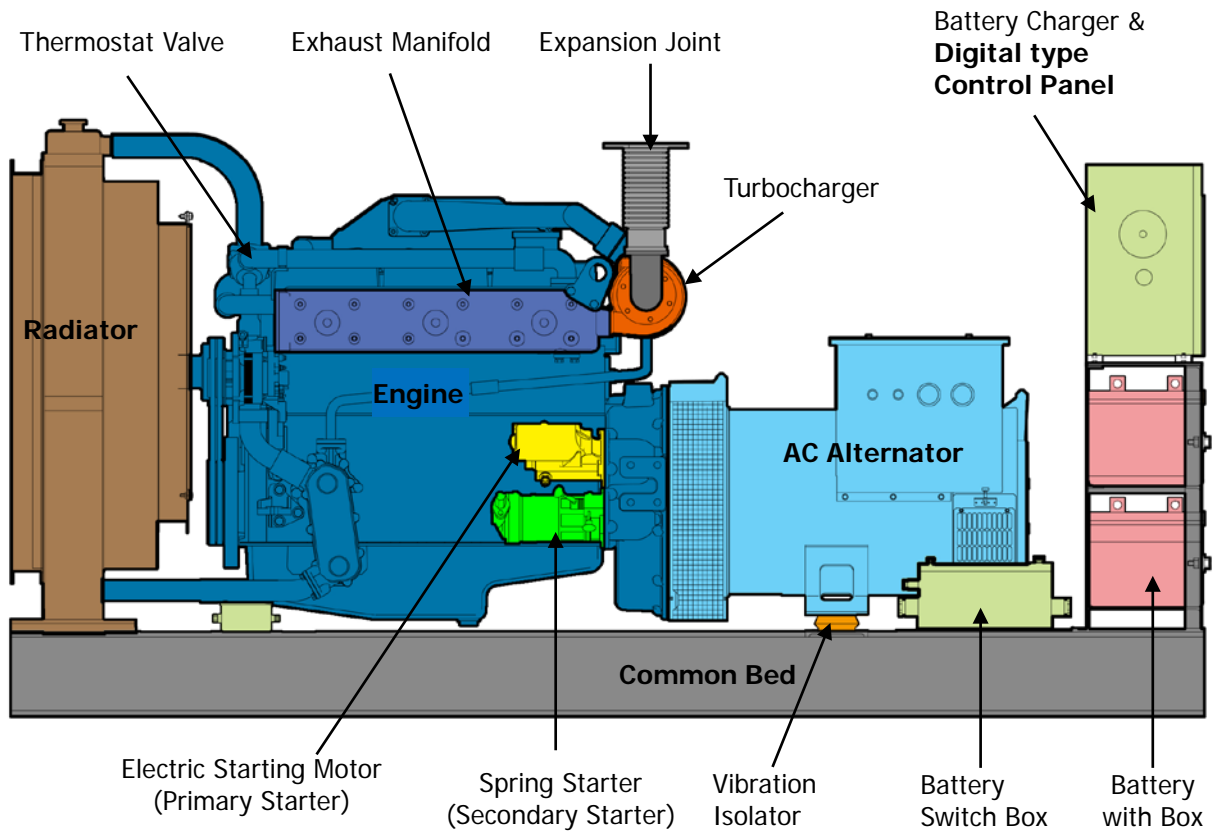
- 2002.08 Establishment
- 2002.11 Vendor of Daewoo Shipbuilding Marine Engineering Co.
- 2004.05 Vendor of Hyundai Mipo Dockyard, Samsung Heavy Industries
- 2005.02 Vendor of Hyundai Heavy Industries Co.
- 2006.10 Production of Emergency Gen-Set for LNG Ship for SHI
- 2007.05 Production of Dead Ship Gen-Set for Drill-rig
- 2007.09 Relocated Plant & Office to GIMHAE Jinyeong
- 2008.06 New Line-up with Doosan Infracore Marine Diesel Engine
- 2008.12 Delivery of Emergency Gen-Set to Japanese shipyard
- 2009.06 Development of Digital Type Control Panel for Emergency Gen-Set
- 2010.05 Delivery of VSP Gen-Set Package for WHRP Platform
- 2011.05 Approval of Japanese Government Regulation for Car/Ferry Vessel
- 2012.06 Delivery of Harbour Gen-Set with MAN D2842 Engines
- 2012.12 Awarded "World Class Product of Korea" by Korean Government
- 2013.07 New Line-up with MTU Marine Diesel Engine
- 2014.12 Delivery of 1,100kW(RMRS) Emergency Gen-Set for Arctic LNG Carrier
- 2015.04 Delivery of MTU Model Remote Radiator Type Gen-Set
- 2017.03 Awarded "Small Giant Company Korea 2017" by Korean Government
- 2018.01 New Line-up with WEICHAO Diesel Engine for below 100kW Gen-set
- 2019.11 Relocated Plant & Office to GIMHAE Jillye

Organization



- Office Main Number : +82-55-343-9870
- Sales Team - Korean Market : +82-55-343-9874
- Sales Team - Overseas Market : +82-55-343-9878
- Q.A Team : +82-70-5056-6464

Outline of Emergency Generator



Emergency Generator Set (150kW, 60Hz)

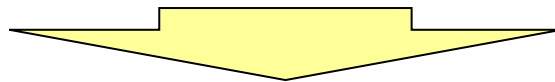


Digital Type Control Panel

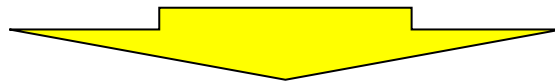
Characteristics of Emergency Generator

Special Requirements for Emergency Generator

- **PRIME MOVER**
 - Marine Prime Rating
 - High Speed Diesel Engine
 - Variety of Options
- **DUAL STARTING SYSTEM**
- **AUTHORIZED CLASS SOCIETY CERTIFICATION**
- **TECHNICAL DOCUMENT**
 - Discussion / Approval / Working / Final Drawing



PROFESSIONAL ENGINEERING COMPANY



- **CUSTOMER ORIENTED**
- **DEVELOPING PROJECT EXECUTION**
 - On time
 - Meet Budget
- **CUSTOMER ACCEPTANCE AND FEED-BACK SYSTEM**
- **ACTIVE QUALITY AND PROCESS**
 - Improvement System

Specification of Generators

Powered by **DOOSAN INFRACORE** Engines

Emergency Generator Set

| Gen-Set Ratings (kW) | Diesel Engine | | Dimension L x W x H (mm) | Weight (kg) |
|----------------------|---------------|-------------|--------------------------|-------------|
| | Model | Output (kW) | | |
| 100 ~ 125 | AD136TI | 138 | 2,750×950×1,450 | 1,700 |
| 126 ~ 165 | AD086TI | 186 | 2,910×950×1,550 | 2,000 |
| 166 ~ 220 | AD126TI | 247 | 3,300×1,150×1,550 | 2,550 |
| 221 ~ 270 | 4AD126TI | 302 | 3,400×1,150×1,600 | 2,800 |
| 271 ~ 320 | AD158TI | 353 | 3,450×1,400×1,800 | 3,200 |
| 321 ~ 400 | AD180TI | 441 | 3,500×1,400×1,850 | 4,000 |
| 401 ~ 500 | AD222TI | 530 | 3,800×1,400×1,950 | 4,450 |

Powered by **WEICHAI** Engines

Emergency Generator Set

| Gen-Set Ratings (kW) | Diesel Engine | | Dimension L x W x H (mm) | Weight (kg) |
|----------------------|---------------|-------------|--------------------------|-------------|
| | Model | Output (kW) | | |
| 30 ~ 40 | WP4CD55E201 | 50 | 2,300×900×1,400 | 1,250 |
| 41 ~ 50 | WP4CD66E201 | 60 | 2,300×900×1,400 | 1,250 |
| 51 ~ 80 | WP4CD100E201 | 90 | 2,400×900×1,400 | 1,300 |

- 60Hz, 1,800rpm, AC450V, IP23, Insulation Class "H" with Temperature Rise Class "F"

Specification of Generators

Powered by **Mitsubishi** Engines

Emergency Generator Set

| Gen-Set Ratings (kW) | Diesel Engine | | Dimension L x W x H (mm) | Weight (kg) |
|----------------------|---------------|-------------|--------------------------|-------------|
| | Model | Output (kW) | | |
| 500 ~ 570 | S6R-MPTAW | 635 | 4,600 x 1,800 x 2,500 | 5,800 |
| 571 ~ 760 | S12A2-MPTAW | 828 | 5,500 x 1,900 x 2,700 | 7,500 |
| 761 ~ 1,150 | S12R-MPTAW | 1,270 | 5,600 x 2,200 x 2,700 | 11,300 |
| 1,151 ~ 1,550 | S16R-MPTAW | 1,690 | 6,500 x 2,200 x 2,900 | 15,500 |

Powered by **MTU** Engines

Emergency Generator Set

| Gen-Set Ratings (kW) | Diesel Engine | | Dimension L x W x H (mm) | Weight (kg) |
|----------------------|---------------|-------------|--------------------------|-------------|
| | Model | Output (kW) | | |
| 500 ~ 630 | 12V 2000 P82 | 695 | 4,450×2,100×2,650 | 6,600 |
| 631 ~ 850 | 16V 2000 P82 | 930 | 5,100×2,450×3,150 | 8,500 |
| 851 ~ 1,500 | 12V 4000 P83 | 1,680 | 6,400×3,800×2,750 | 13,800 |
| 1,501 ~ 1,950 | 16V 4000 P83 | 2,240 | 6,650×3,800×2,750 | 15,500 |
| 1,951 ~ 2,500 | 20V 4000 P83 | 2,800 | 8,500×3,800×3,600 | 21,200 |

- 60Hz, 1,800rpm, AC450V, IP23, Insulation Class "H"
with Temperature Rise Class "F"

Option Parts of Generator Set

Secondary Starting System

※ Primary Starting Method : Electric Battery System

| Output(kW) | 30 ~ 80 | 100 ~ 165 | 180 ~ 270 | 300 ~ 760 | 800 ~ |
|------------|---------|-----------|-----------|-----------|-------|
| Battery | | | | | |
| Spring | | | | | |
| Hydraulic | | | | | |
| Air | | | | | |

Maker Standard

Maker Option



<Spring Starter>



<Hydraulic Starter - Prestolite type>



<Hydraulic Starter - Hydrotor type >

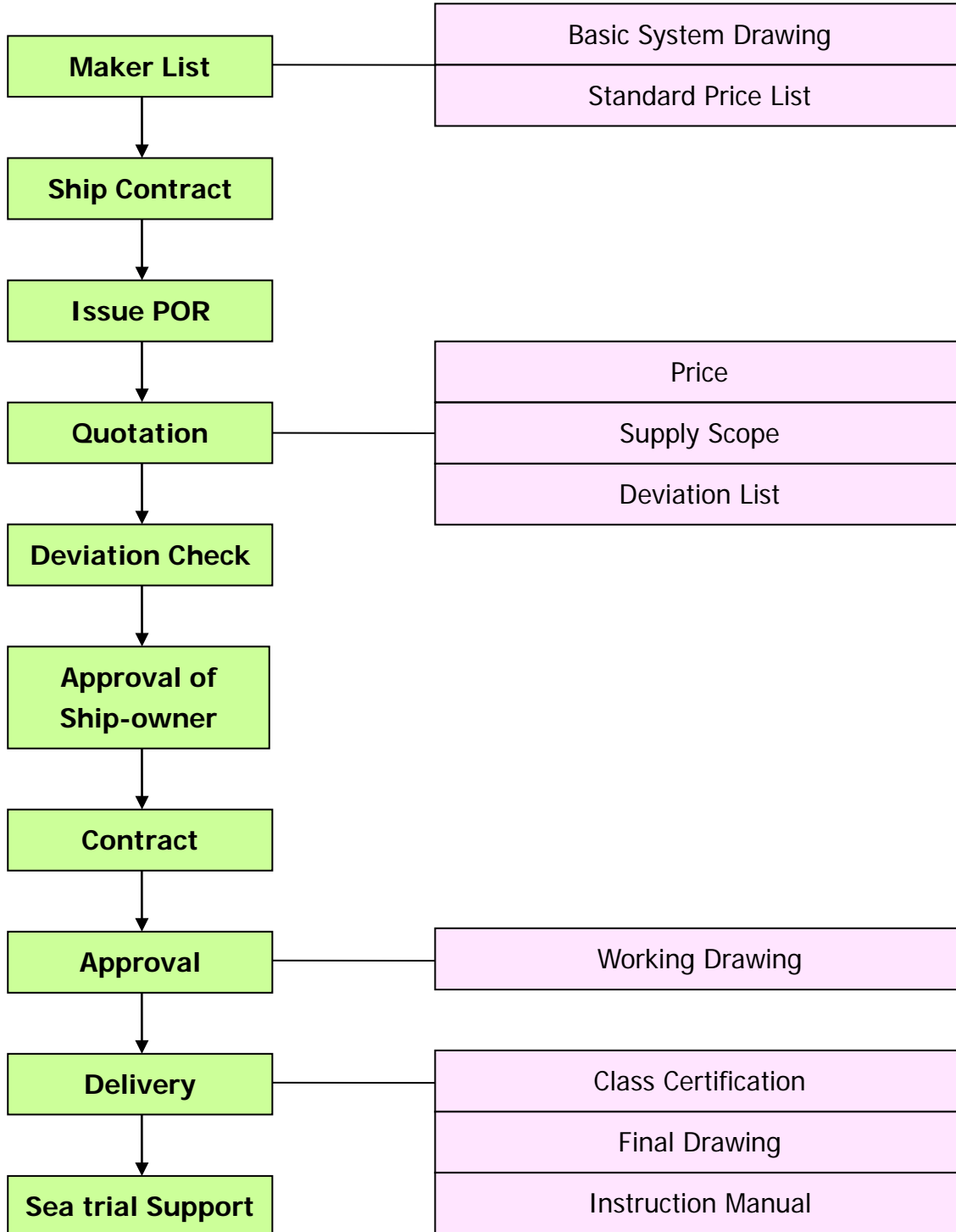


<Compressed Air Starter>

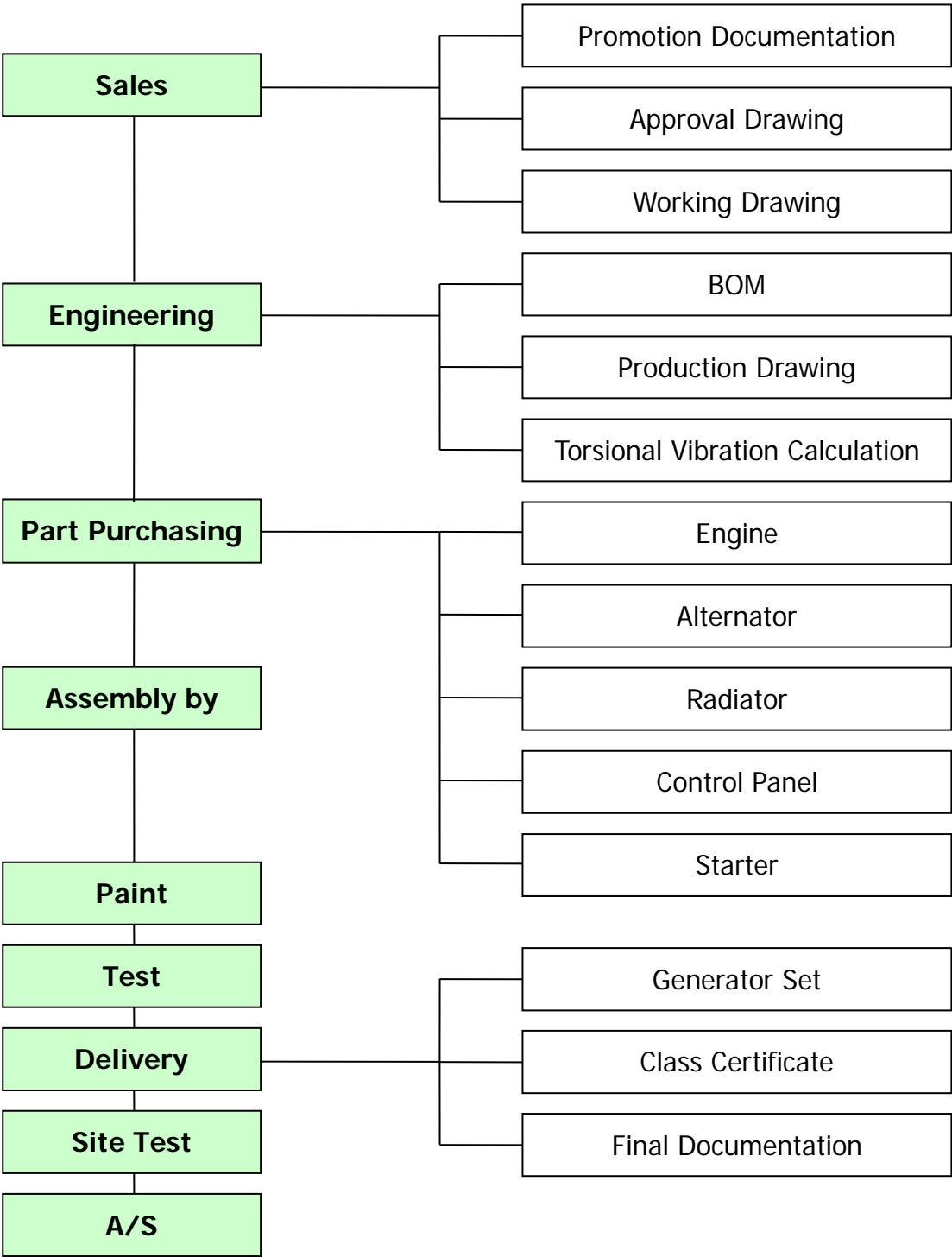
Suppliers of Parts

| Unit Name | Supplier | Remarks |
|--------------------|--|--------------------------------|
| Diesel Engine | DOOSAN INFRACORE MITSUBISHI MTU WEICHAI | KOREA JAPAN GER CHINA |
| Alternator | NIDEC LEROY SOMER CUMMINS GENERATOR | JAPAN UK |
| Hydraulic Starting | PRESTOLITE KTI IPU GALI | UK USA UK SPAIN |
| Air Starting | TDI IPU GALI Ingasol Rand | USA UK SPAIN USA |
| Spring Starting | STARTWELL | UK |
| Vibration Isolator | TRELLEBORG | UK |
| Control Panel | KMC | KOREA |
| Radiator | DAEHEUNG RADIATOR | KOREA |
| Common Bed | DOOSUNG | KOREA |

Business Procedure



Production Process



Suggestions

ACTIVITY OF GPC

- SATISFYING TO EXPECTATIONS OF CUSTOMERS
- MORE COMPACT SIZE
- VARIETY OF OPTIONS
- MINIMUM OVER-HEAD COST

**THE WORLD RENOWNED
EMERGENCY GENERATOR MANUFACTURE**

ADVANTAGES OF PURCHASE

- EMERGENCY GENERATOR SET AT REASONABLE PRICE
- SAVING LABOR FROM STANDARDIZATION
- JUST ON TIME