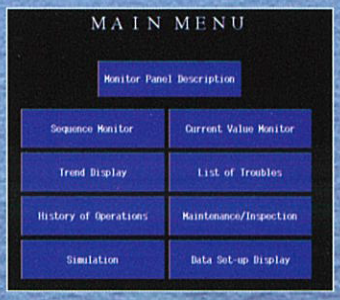
Shaft Generating System

System Configuration

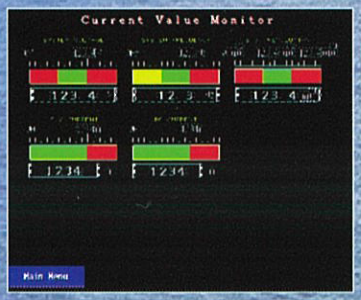
Shaft Generating System is consists of Shaft Generator Motor (SGM), Synchronous Condenser (S/C) and Frequency Converter Panel (FCP).

System Output

200kW ~ 4,000kW



Main menu



Current Value

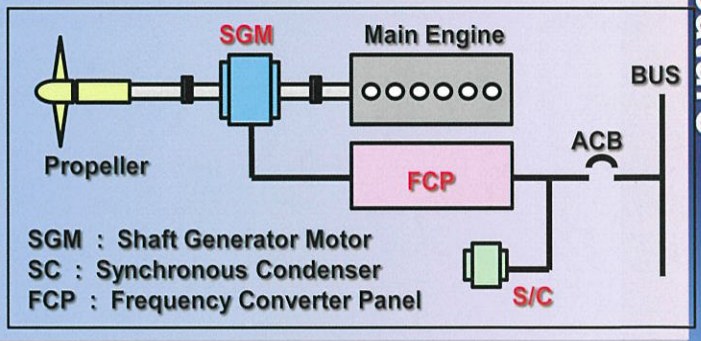
Error Indication

S series – THYRISTER Inverter SGM System

Major Advantage

- F. O. saving
- Maintenance cost saving
- Labor Saving
- M/E boosting (SM mode)
- Electric propulsion (PM mode)

Feature



SGM : Shaft Generator Motor
SC : Synchronous Condenser
FCP : Frequency Converter Panel

FAT - Factory Acceptance Test

System performance test is carried out by using actual load as FAT at Taiyo Factory before delivery, which can be realized smooth process at shipyard & perfect performance on board ship.

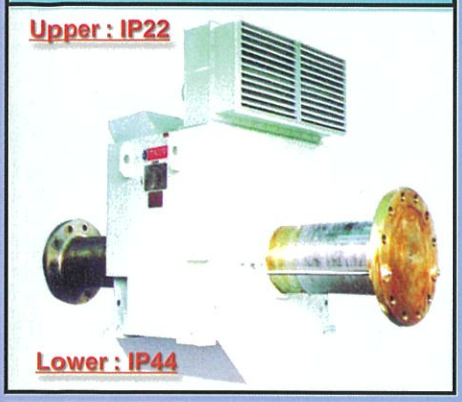
Energy Saving

S series – THYRISTER Inverter SGM System

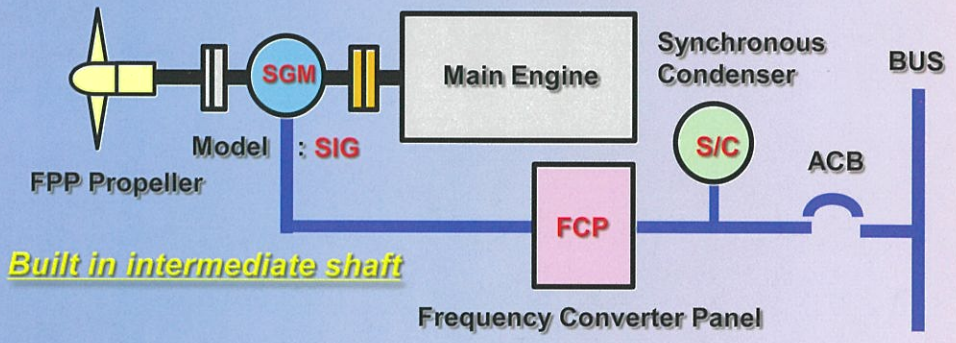
Feature

Major Models & System Configuration

model SIG

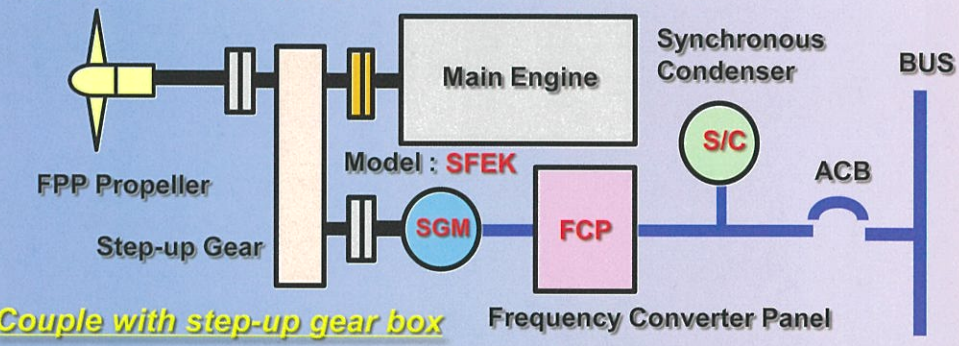


- System output : 200 to 4,000kW
- Revolution : 110 / 92 / 79 / 69 / 62 / 55min^{-1}



model SFEK

- System output : 200 to 2,000kW
- Revolution : 1,200min^{-1}

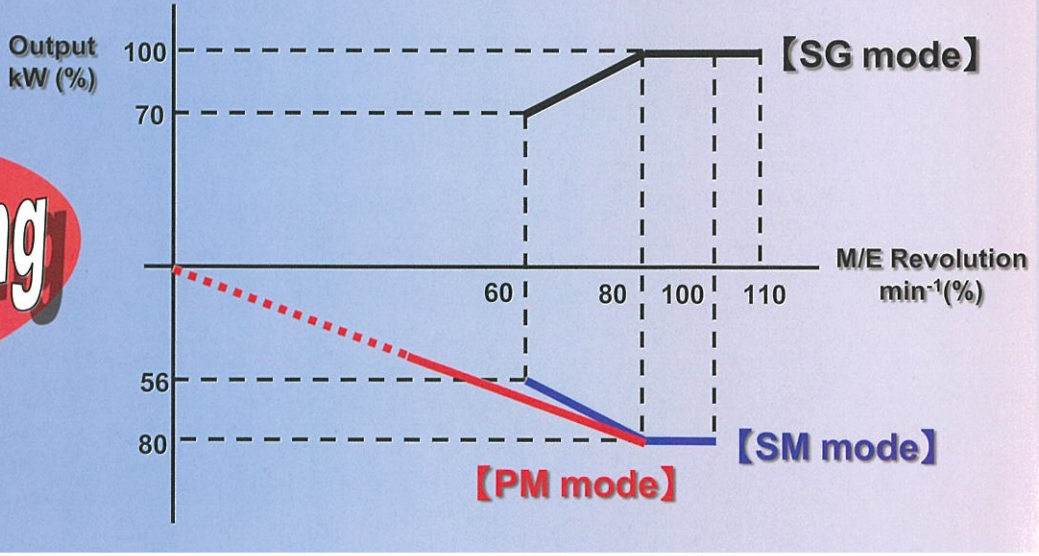


Operation Mode

(1) SG mode: SG (Shaft Generator) system by using M/E energy (basic system).

(2) SM mode: SM (Shaft Motor) system by using ship's surplus energy instead of SG for boosting M/E in case that TG (STG: Steam Turbine Gen., PTG:Power Turbine Gen.) is installed in the system. Thyrister of BUS side in FCP becomes a CONVERTER and Thyrister of SGM side in FCP becomes an INVERTER. This is opposite function compare with SG mode.

(3) PM mode: PM (Propulsion Motor) system by using ship's energy according to disconnect M/E from propeller shaft in case that M/E was damaged or environmental efficiency was required in harbor.



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