

Marine Motor

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Mahi Mahi Container Vessel Main Generator  
Overhaul Case

Matson's container vessel- Mahi Mahi had encountered serious accident on its main generator in Aug, 2017.



### **Motor Parameter:**

Power: 3125 KVA

Frequency: 60 Hz

Voltage: 480V

Current: 3759A

Speed: 450rpm

With the rotor scrapping the stator, damage condition is as follows:



Generator's stator coil spark through;

6 insulations of generator's rotor pole coil spark through;

Grounding voltage-withstand test failure of exciter's rotor coil;

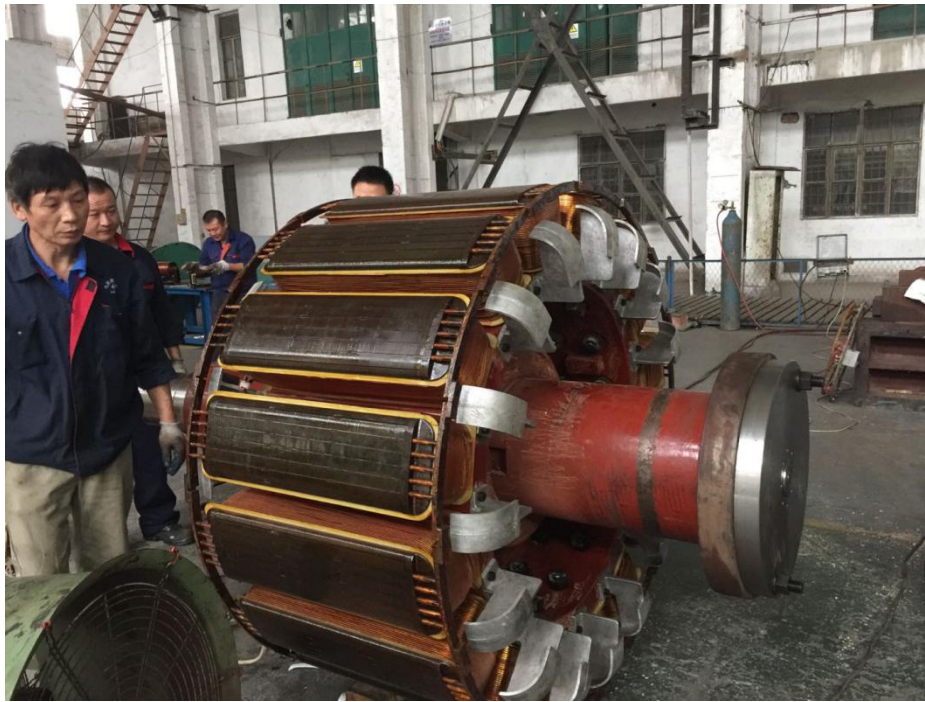


Exciter's stator coil damage due to chamber scratching;

All rotor's fan blades broken;

Fixing bolts on rotor's main pole broken, 3mm abrasion on 1 pole silicon steel;





All dumping rings broken;  
2 transformers in terminal box spark through;

12 connecting terminals cracking damage;



Due to the sail schedule, we have only 23 days to complete the overhaul.

On top of all the items need to be repaired, we also had to conduct a series of delivery test pursuant to American Bureau of Shipping requirements.



It is required to conduct a full-load test and an overload/overcurrent test, which requires the generator to be capable of withstanding a current equal to 1.5 times the rated current for not less than 30 seconds.



In order to meet the requirements, we had purchased a driver motor and rented a load bank.







It took us approximately 60 hours to complete everything on the test protocol, with the witness of A.B.S Marine Surveyor.




Our hardwork and effort had been greatly recognized and praised by the  
ABS surveyor and the ship owner.

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N/RepdNo

/Test Record

主检/Tested by	W/m
参加者/Participants	徐斌峰 汪智强 许斌峰 刘兵
ATTACHMENT TO: 823393066	
NOTED <input type="checkbox"/> REJECTED <input type="checkbox"/>	
WITNESSED <input checked="" type="checkbox"/> RETEST <input type="checkbox"/>	
M. L. YANG 22/04/2017	
H. L. YANG	
ABS SHANGHAI PORT MLO	
	



上海电机集团梅山电机有限公司

Shanghai Electrical Machinery (Group) Co., Ltd

Meishan Electrical Machinery Ltd