



HANWA ENGINEERING CO., LTD.

9F, URBAN RESEARCH BLDG. 1-6-4, KYOMACHIBORI
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voucher

VESSEL NAME:	DATE: 23RD JAN. 2020
PLACE OF WORK: JIANGYIN PORT	REF. NO:

WE ARRANGE FOLLOWING WORKS TO SUBJECT SHIP AT JIANGYIN PORT

SUBJECT: FOR AIR CONDITION SYSTEM FREON LEAKING

As reported the leaking Freon from air condition system, arrange technicians boarding ship at Jiangyin Port to inspect system.

Took out Freon from system, pressure test by nitrogen gas and found following leakings:

1. No.1 compressor cylinder cover
2. High pressure gauge at No. 2 compressor
3. No.2 evaporator has 5 leaking places
4. Solenoid valve damaged in way of No. 1 evaporator

Repairing:

1. Due to no spare gasket, using old gasket pasted with gasket glue, fit back
2. Block the connection due to no spare gauge
3. Built up leaking places by welding
4. No spare solenoid valve, No.1 evaporator was blocked

Also found one of cylinder temperature is higher in No.1 compressor, the cooling water inlet is very high which has been informed to c/e

Finally working only No. 2 compressor along with No.1 evaporator.

Supplies:

- | | | |
|-----------------|------------------|-----------|
| 1. Nitrogen gas | 40liters/ bottle | 6 bottles |
| 2. Freon R404A | 10kgs/bottle | 6 bottles |

Working time 21:00hrs on 21th Jan till to 11:00hrs on 23rd

Boarding pass for three technicians

Transportation from Nantong to Jiangyin port two round trips(one time for bring Freon)

Customs formalities 2 times

