



REX MARINE & ENGINEERING PTE LTD



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SINGAPORE OFFICE

REX MARINE & ENGINEERING PTE LTD
REX REFRIGERATION & AIRCONDITIONING SERVICE

245 KAKI BUKIT AVE 1
SHUN LI INDUSTRIAL PARK
SINGAPORE 416057

VIETNAM OFFICE

REX MARINE & ENGINEERING PTE LTD

C/O
SAIGON SHIPYARD
99 Quarter 3, Thanh My Loi ward, Dist 2, HCMC, Vietnam

INDONESIA OFFICE

PT REX MARINE INTERNATIONAL
KOMPLEK CENTRAL
ANEKA NIAGA BLOCK NO.6
SAGULUNG, BATAM



UAE OFFICE

FRONTIER INTEGRATED
ENGINEERING LLC
M13 NO.16
MUSSAFAH INDUSTRIAL ESTATE
ABU DHABI





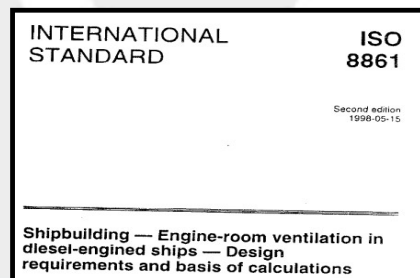
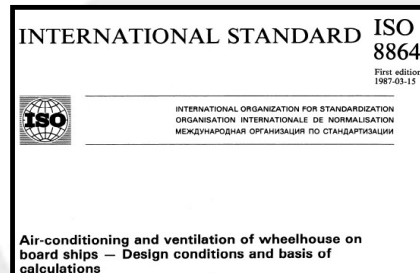
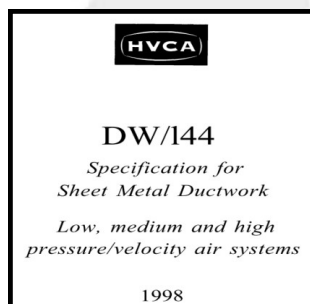
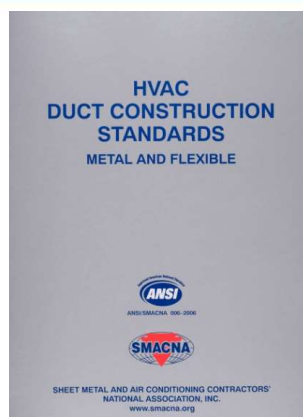
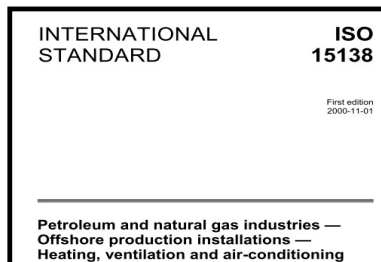
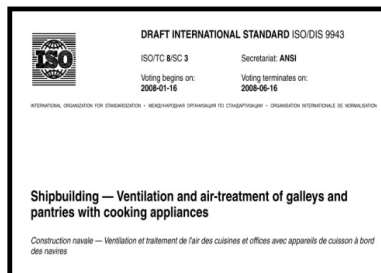
Company Profile

- Established since 1973, one of the pioneers in this industry.
- Core business – Providing service, repair, maintenance to RHVAC system for Marine, Oil & Gas Industry.
- Started Turnkey Projects in 2004, securing more than 100 projects since then.
- Strive to provide quality service & professional engineering to our valued client.

What we do:

- Total solution for Accommodation and Refrigeration Heating Ventilation Air Conditioning work for Marine/offshore, oil and gas industry;
- From design consultation to full construction, testing and commissioning of system;
- Design and execute according to marine code and standards;

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STANDARDS
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ISO 15138 – Petroleum and Natural Gas Industries – Offshore Production Installation, Heating Ventilation and Air Conditioning

ISO 8861 - Engine Room Ventilation

ISO 8862- Air Conditioning & Ventilation of Machinery Control Rooms

ISO 8863- Ship Wheelhouse Windows

ISO 8864- Air Conditioning & Ventilation of Wheelhouse

ISO 9099- Air Conditioning & Ventilation of Dry Provision Store

ISO 9785- Ventilation of Cargo Space

ISO 9943- Ventilation and Air Treatment of Galleys and Pantries

ISO 7547- Air Conditioning & Ventilation of Accommodation Spaces

INTERNATIONAL STANDARDS

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- HEAT LOAD CALCULATION & DESIGN
- VENTILATION CALCULATION & DESIGN
- AIRFLOW & DUCT SIZE DESIGN
- SINGLE LINE DRAWING
- EQUIPMENT SELECTION
- EQUIPMENT P & ID DRAWING
- TECHNICAL SPECIFICATION FOR THE EQUIPMENTS
- SUBMISSION OF LAYOUT DRAWING FOR CLASS APPROVAL
- PROJECT MEETING

ENGINEERING PHASES
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- ❖ CHILLED WATER UNIT
- ❖ CONDENSING UNIT (AIR COOLED / WATER COOLED)
- ❖ AIR HANDLING UNIT
- ❖ PACKAGE UNIT
- ❖ DECK UNIT
- ❖ FIRE DAMPER, VCD, SHUT OFF DAMPER ETC.
- ❖ CABIN UNIT
- ❖ VENTILATORS
- ❖ DUCTING & FITTINGS
- ❖ EVAPORATOR COIL / CHILLER COIL
- ❖ SHELL & TUBE CONDENSOR

OUR PRODUCTS
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- ❖ DESIGN AND ENGINEERING OF HVAC WORKS
- ❖ INSTALLATION OF ALL KIND OF A/C UNITS
- ❖ COMMISSIONING
- ❖ LEAK TEST & SMOKE TEST
- ❖ AIR BALANCING
- ❖ TROUBLE SHOOTING OF ALL KIND OF A/C UNITS
- ❖ COMPRESSOR OVERHAULING
- ❖ SUPPLY OF SPARE PARTS
- ❖ ELECTRICAL COMMISSIONING
- ❖ STEEL WORK and DUCT WORK (RELATED TO HVAC)

OUR SERVICES
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Marine Application Condensing unit specification:

- Comply to IP code 55 enclosure rating;
- High corrosion resistant Copper Nickel tube / Titanium tube for condenser;
- Complying to marine code and standards;

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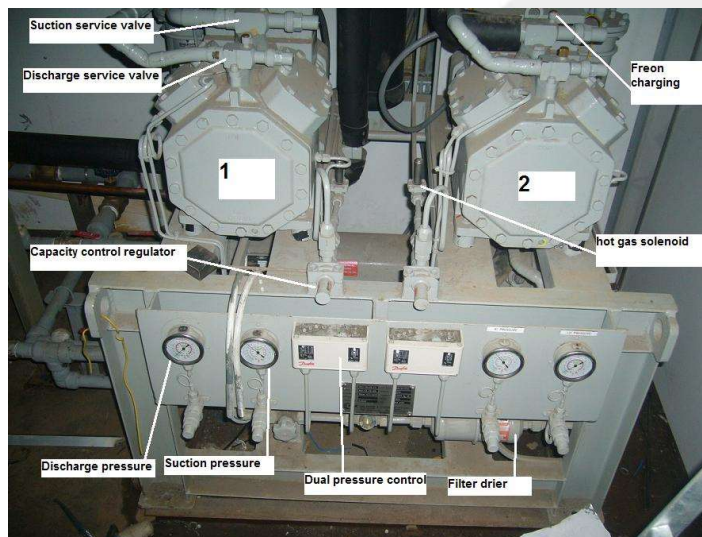
Customised 150 RT Open Drive Condensing Unit using Carrier brand compressor suitable for Sea water cooled



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Bitzer brand Semi-hermetic Compressor Condensing Unit for Cold room storage



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Marine Coldroom storage specification:

- Comply to IP code 56 enclosure rating;
- Strong and rigid against rolling and pitching in rough sea;
- Stainless steel panels and shelving for hygiene food storage;
- Aluminum checker plate floor / marine ceramic tiles / hygiene class epoxy coated floor finishing;
- Complying to marine code and hygiene standard;

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Customised to size standalone chiller;
Customised freezer / chiller room with shelving;
Steel floor / marine ceramic tiles floor finishing;



Marine Application Rooftop Air Conditioner unit specification:

- Comply to IP code 55 / 56 enclosure rating;
- High corrosion resistant Epoxy coated Aluminum fins / Copper fins for condenser;
- High corrosion resistant Marine paint coated steel / Stainless steel casing, frame and structure.
- Comply to marine code and standards;

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Customised Roof top units suitable for:

- Offshore modules usage
- Fresh air pre-conditioning application



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Marine Application Air Handling unit specification:

- Comply to IP code 55 / 56 enclosure rating, marine code and standards;
- Heating, cooling (chilled water / DX), humidification, air treatment, energy recovery application;
- High corrosion resistant Epoxy coated Aluminum fins / Copper fins for cooling coil / evaporator;
- High corrosion resistant Marine paint coated steel / Stainless steel casing, frame and structure.

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Customised with backup unit
Air treatment and
Energy recovery application



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Hot water / electric heating
Steam humidification or
Atmoised mist humidification



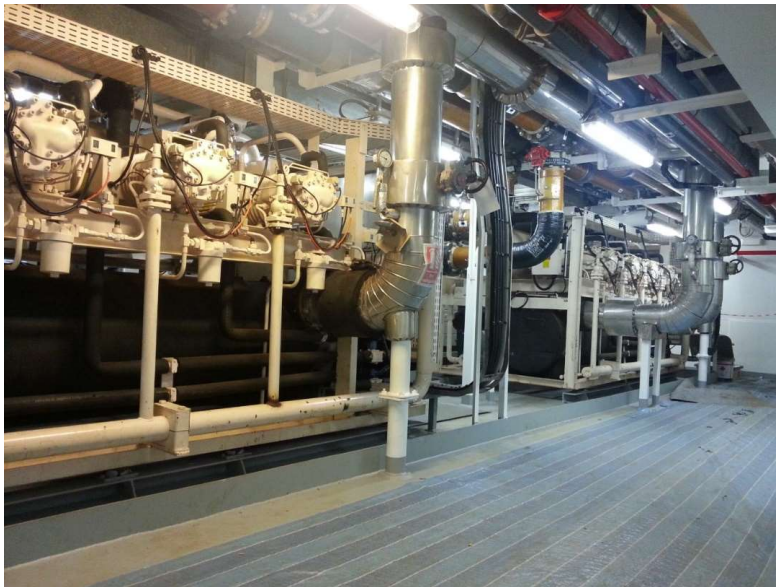
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Marine Application Chiller unit specification:

- Comply to IP code 55 / 56 enclosure rating, marine code and standards;
- Air cooled or water cooled suitable for harsh offshore environment;
- High corrosion resistant Copper Nickel tube / Titanium tube for condenser or cooler;
- Plate type heat exchanger suitable for smaller footprint;
- High corrosion resistant Marine paint coated steel / Stainless steel casing, frame and structure.

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- Multi-screw compressor chiller with redundancy
- Cooling capacity range: 350KW – 2000kW



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Full stainless steel air cool chiller units with
copper fin / copper tube condenser



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Marine Cabin interior work specification:

- Comply to International Labour Organisation regulation, marine regulation;
- Comply to comfort environment class for sound and vibration;
- Material used comply to marine usage with certification;
- 3D modelling and colour matching service;
- Modular design applicable;

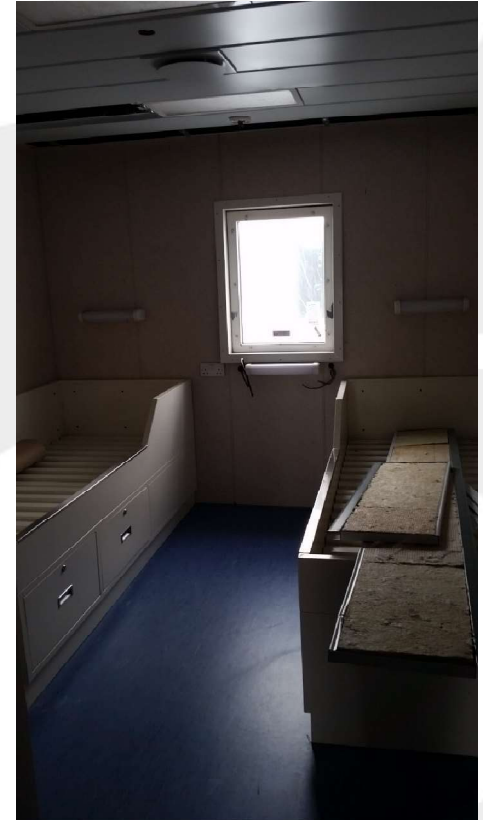
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Messroom



Cabins



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Waiting area

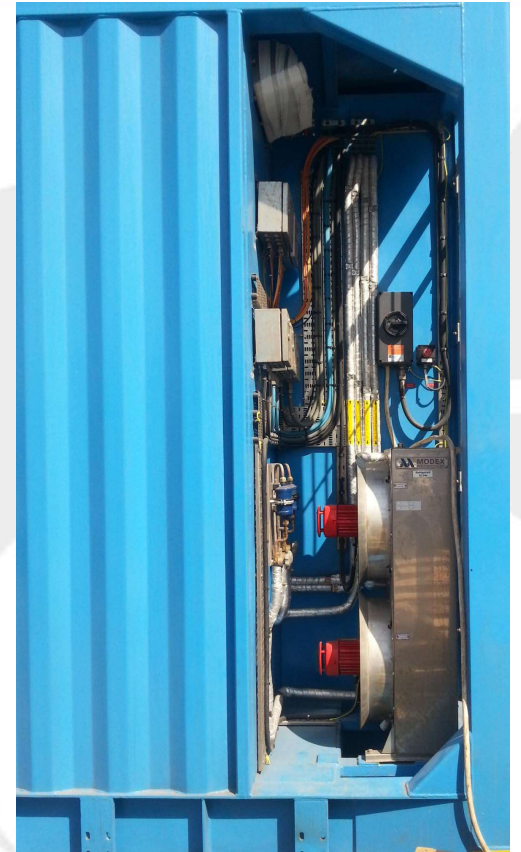


Modular cabin
and toilet



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- Customised split unit air conditioner for modules



Marine Steel work specification:

- Sand-blasted steel with primer and zinc-rich coated, finished with marine paint work;
- Hot dipped galvanized or Stainless steel type upon request;
- Water tight and Weather tight applicable;
- Manufactured according to marine regulation requirement;



Ventilator box



Fan trunk



Ventilator

Types of ventilators



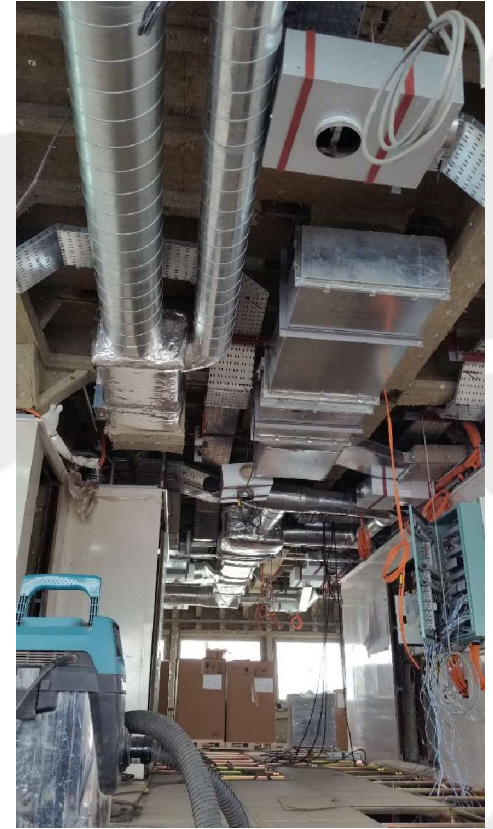
Marine Duct work specification:

- Comply with marine regulation for fire and safety;
- Comply with comfort requirement for sound, air velocity and vibration;
- Non-combustible material;
- Low flame spread;



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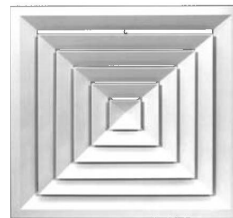
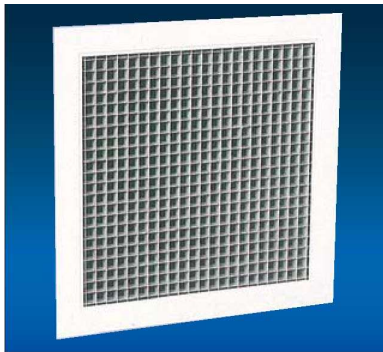
Well spaced coordinated duct arrangement;
High pressure, high velocity duct for better
Space coordination;



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Fire Damper



Air Outlets



PRDs

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Engine exhaust insulation and cladding

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Pipe work & Cladding



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Kitchen Steel work



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Dinning area Steel work



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Outdoor Steel work



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Special HVAC Equipment specification:

- Comply with offshore hazardous requirement;
- Hazardous class 1 or 2, group I or II application ;
- Pressurisation with outdoor air / breathing air bottles;
- H₂S, etc chemical filter unit

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Exd heater



Exd Compressor



Exd Roof top unit



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Exd Air Conditioner



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Motor

1 Ph or 3 Ph
EExd, EExde
EExn or EExna
Zone 1 or Zone 2 (Gas)
Zone 21 or Zone 22 (Dust)
Voltages to suit

Motors available with or without feet. Motor pedestals also available in same options as fancase. Special paint specifications to suit.

Discharge

With or without flange for most fans. Spigots, valves, non-return anti-spark valves, flange adaptors and guards available.

Fancase

Aluminium, mild steel or stainless steel (304, 316, 316L, 316Ti), powder coated, offshore surface finishing, bare metal (St St Options) or paintbond 550 (Aluminium options)

Impeller

Aluminium, galvanised steel or stainless steel (same options as fancase)

Inlet

Fitted with brass/copper liner or inlet cone depending on fan type. Can be supplied with a PCD of tappings or studs. Flanges, spigots, ducts, inlet filters, guards also available.



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Exd coldroom container



Exd AHU

Offshore Containerised Module specification:

- Comply with offshore requirement;
- Suitable for accommodation or electrical panels;
- Hazardous class 1 or 2, group I or II application if needed ;
- Stack type or block type;

Accommodation Block / Electrical room

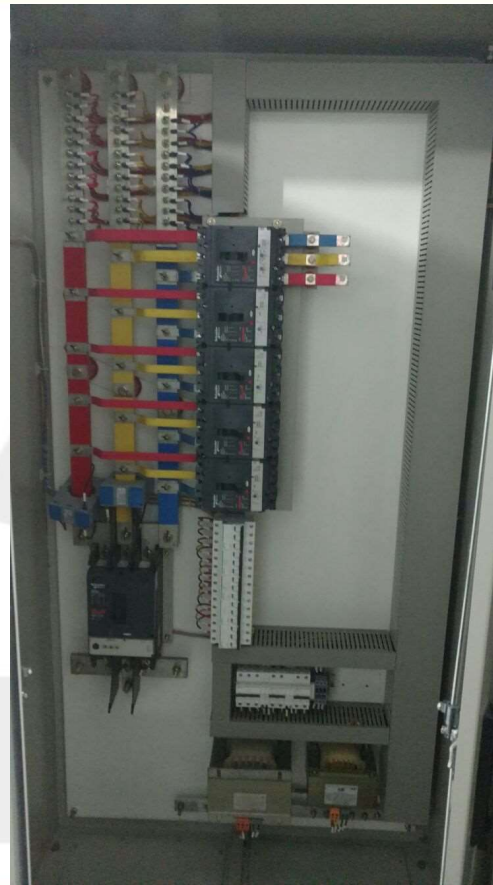


MODULAR SAUNA, SHOWER, LOCKER CONTAINER



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Electrical panel



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Thanks you for viewing us.

Visit our website: www.rexref.com

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