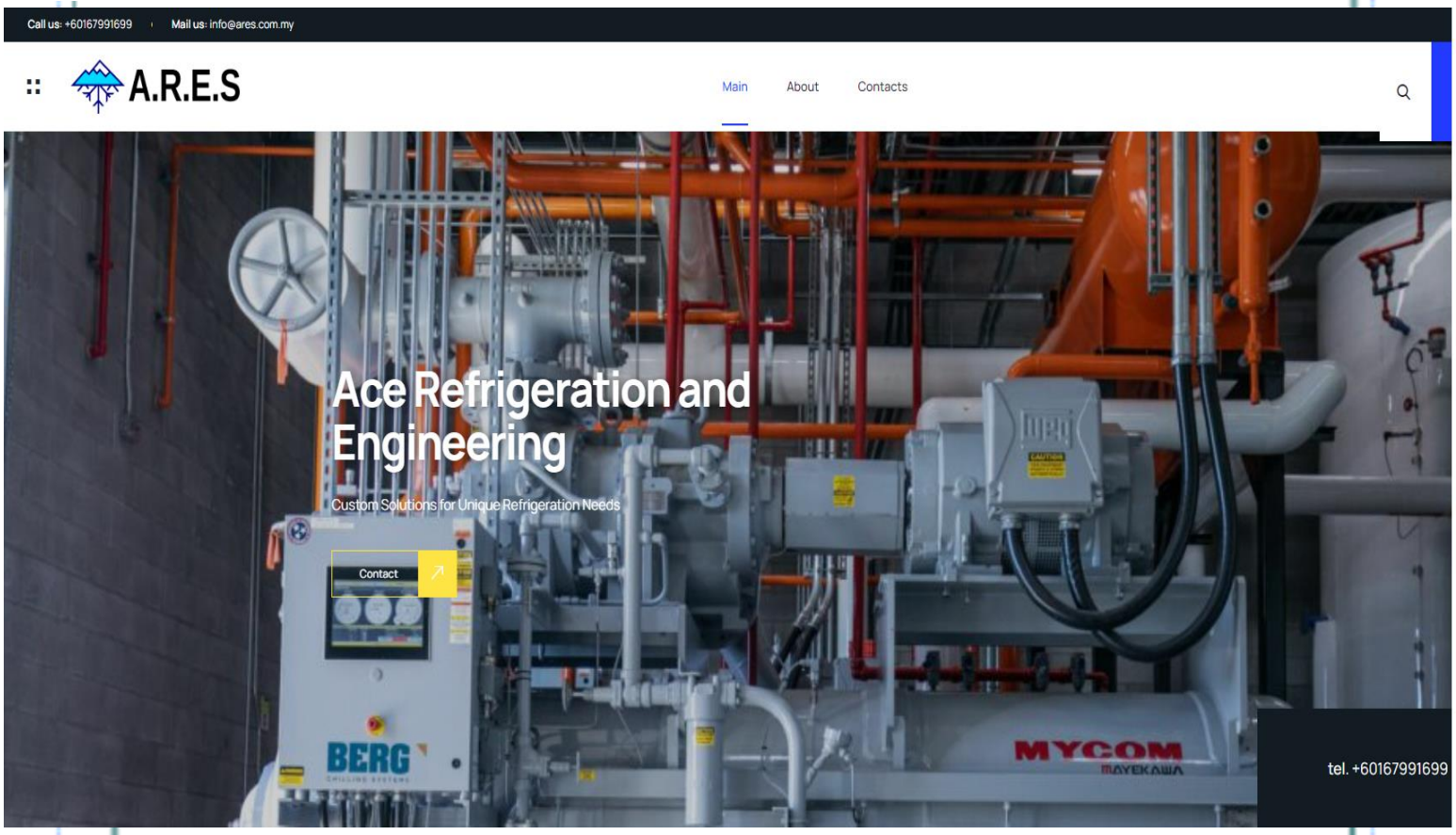
COMPANY PROFILE

A.R.E.S
Ace Refrigeration and Engineering Services

https://www.ares.com.my/
FRANK 0127105212



DEPENDABLE SOLUTIONS FOR ALL YOUR REFRIGERATION AND PROJECT NEEDS

ABOUT US

A.R.E.S
Ace Refrigeration and Engineering Services

ACE REFRIGERATION & ENGINEERING SERVICES WAS INCORPORATED WITH REGISTRATION NUMBER OF 202203147758(003406732-T)

OUR COMPANY IS LOCATED AT:
NO. 10, JALAN BUKIT 9,
BANDAR BARU SERI ALAM,
81750 MASAI, JOHOR
WEBSITE: ares.com.my
Email: info@ARES.com.my
Phone: +60127105212

WHAT WE DO?

Ace Refrigeration & Engineering Services

A.R.E.S. is a full-service Industrial Refrigeration & Engineering company that helps improve your business efficiency, performance, and sustainability.

Industrial refrigeration

Our industrial refrigeration services include the design, installation, troubleshooting and maintenance of all types such as:

- Cold Rooms
- Chillers
- Heat pumps
- Preparations for JKKP inspections
- Annual service contracts with 24 hrs standby coverage

Our company is specialized in Ammonia refrigeration. Applying the highest safety standards will result that your equipment is taken care off in a safe way.

Engineering services

This section covers all related work such as Consultancy, Engineering/Procurement/Construction (EPC) and Project Management for various application in Food, Pharmaceutical and Petrochemical Industries.

Ammonia evacuation for inspection services (JKKP)

A.R.E.S. will provide an ISO container to pump down the ammonia from your system into this container. This will bring the following advantages:

1. Ammonia transfer to the ISO container will reduce your chemical waste generation significantly, immediately turn into cost savings on waste disposal.
2. The ammonia recovered from the system will be charged back into the system which will reduce the cost of purchase of new ammonia.

MISSION AND VALUES

MISSION:

Ace Refrigeration & Engineering Services is committed to providing superior customer service, quality work, and dependable solutions for all your Refrigeration and Project needs. We strive to exceed expectations by utilizing our collective knowledge and experience to provide High Safety Standard, Energy Efficient and cost-effective solutions for all our customers.

Our team of certified technicians is dedicated to delivering top-notch service in a timely manner. We take pride in offering prompt response times, quality part, and customer satisfaction.

VALUES:

- Safety is priority
- Don’t optimize for the short term
- We dig deeper
- We lead with optimism
- Ownership mentality
- Do what’s right

Some Brands that can be Supplied & Serviced

Frick BY JOHNSON CONTROLS

Howden

BAC

ENGINEERING TOMORROW Danfoss

SABROE BY JOHNSON CONTROLS

Dixell

EMERSON

Bitzer

GEA engineering for a better world

Castel

evapco

LEDERLE Hermetic

Projects

RE-LOCATION OF RECEIVER AFTER EVACUATION OF AMMONIA

Chronology

Reason of attendance: Customer want to relocate ammonia receiver

Job done:

Pumpdown ammonia in system

Empty out ammonia in receiver and flush until safe for mechanical work

Flushing unit and leak test using N2

Vacuum system and commissioning unit

Troubleshooting

CLEAR UP CONTAMINATED OIL IN AMMONIA SYSTEM AT BLC

Chronology

Reason of attendance: Customer experience repeated oil filter clog

Job done:

Check on system and oil condition. Suspect product already go to ammonia system and contaminated system.

Pumpdown ammonia in system:

Empty out ammonia in perfector, liquid separator, compressor and flush until safe for mechanical work

Based on discussion need to remove contaminated oil and run back system asap without overhaul if possible

Heat up lube oil and do oil circulation to remove product from compressor unit. Flush out every piping and tubing at compressor unit

Flushing and do inspection on valve station and internal perferctor and liquid separator

Flushing unit and leak test using N2

Vacuum system and commissioning unit

Service

RECOVERY R22 GAS, CONDENSER AND EVAPORATOR TUBE CLEANING AND PLUGGING AT PACIFIC OIL & FATS

Chronology

Reason of attendance: compressor unit tentative major service

Job done:

Do refrigerant recovery with recorded weight recovered

Do tubing cleaning at condenser and evaporator heat exchanger

Conduct leak check on system. Found out got leak at evaporator tubing

Urgently arrange for tube plugging to allow unit run back asap

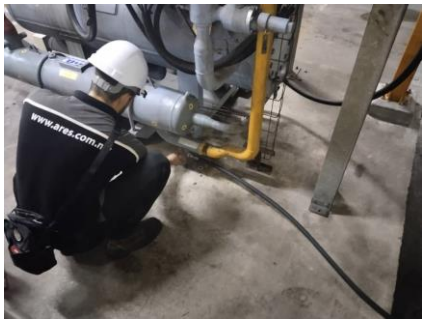
Change oil filter and refrigerant filter

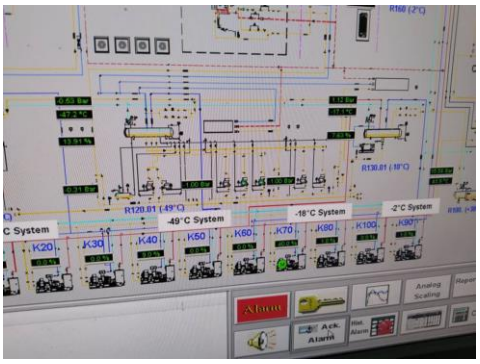
Leak check using N2 on whole system

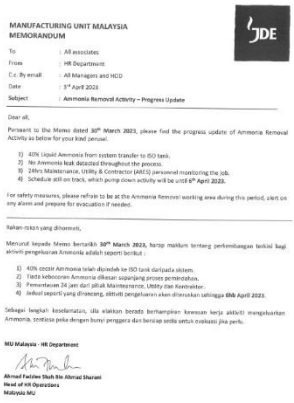
Vacuum unit and commissioning unit

Projects

EMPTY OUT SYSTEM AND TRANSFERRING 7 TON AMMONIA FROM SYSTEM TO ISO TANK AT JDE







MANUFACTURING UNIT MALAYSIA
MEMORANDUM

To : All associates
From : HR Department
C.c. By email : All Managers and HOD
Date : 3rd April 2023
Subject : **Ammonia Removal Activity – Progress Update**

Dear all,

Pursuant to the Memo dated 30th March 2023, please find the progress update of Ammonia Removal Activity as below for your kind perusal.

1) 40% Liquid Ammonia from system transfer to ISO tank.
2) No Ammonia leak detected throughout the process.
3) 24hrs Maintenance, Utility & Contractor (MUC) personnel monitoring the job.
4) Schedule still on track, which pump down activity will be until 6th April 2023.

For safety measures, please refrain to be at the Ammonia Removal working area during this period, alert on any alarms and prepare for evacuation if needed.

Sekian-rakan yang dihormati,

Merujuk kepada Memo bertarikh 30th March 2023, bersama maklum tentang perkembangan terkini bagi aktiviti pengeluaran Ammonia adalah seperti berikut :

1) 40% cecair Ammonia telah dipindah ke ISO tank daripada sistem.
2) Tiada kebocoran Ammonia dikesan sepanjang proses pemindahan.
3) Pemantauan 24 jam dari pihak Maintenance, Utility dan Kontraktor.
4) Jadual seperti yang dirancang, aktiviti pengeluaran akan diteruskan sehingga 6hb April 2023.

Sebagai langkah keselamatan, dia elakkan berada berhampiran kawasan kerja aktiviti mengeluarkan Ammonia, sentiasa peka dengan bunyi penggera dan bersiap sedia untuk evakuasi jika perlu.

MU Malaysia - HR Department

Ahmad Fadzlee Shah Bin Ahmad Sharani
Head of HR Operations
Malaysia MU

Chronology

Reason of attendance: customer request to empty out ammonia from refrigeration system and preserve system with n2

Job done:

ISO tank pressure test and preparation

Pumpdown ammonia from system to receiver

Transfer ammonia liquid from system to ISO tank while monitoring ammonia transferred weight

Depressurize remaining ammonia vapour from system

Flushing system using n2

Vacuum system to remove remaining ammonia smell

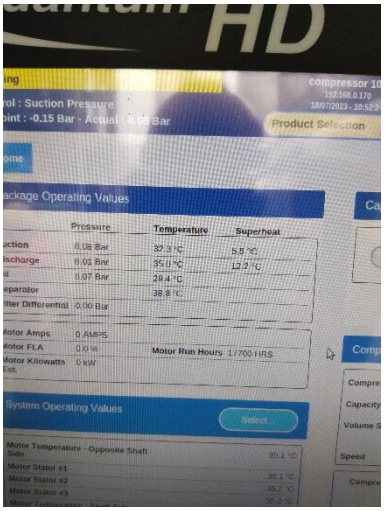
Preserve system with n2 0.6barg

Relocate ISO tank to reserve location

Clear out IBC tank filled with water mix with ammonia

Troubleshooting

TROUBLESHOOTING COMPRESSOR TRIP LIQUID SLUGGING



Chronology

Reason of attendance: customer request to inspect compressor always trip with liquid slugging alarm. Customer already stop the compressor and run backup compressor.

Job done:

Based on discussion with customer, customer already called other contractor and same issue still happening.

Inspect system running condition. Monitor for any sign of liquid flood back from system to compressor.

Monitor and try to determine if there is any bypassing valve causing liquid can go back to compressor.

Inspect discharge temperature sensor condition.

Test run compressor and monitor. Found out liquid slugging alarm cause by false signal, not actual liquid flood back to compressor.

Found out abnormal fluctuation of temperature sensor reading cause false alarm

Customer order new power supply 240v to rectify issue permanently.

Inspection

EVAPORATIVE CONDENSOR LEAK CHECK

Chronology

Reason of attendance: customer request to check their evaporative condenser have ammonia smell when they stop the unit.

Job done:

Site visit at customer site, from initial inspection, found out there is trace of ammonia leak on coil.

Customer erect scaffolding and open condenser side cover to inspect on coil condition.

Customer request ARES to attend and do leak check and evaluation on evaporative condenser.

Found out lot of coil galvanize coating already in bad condition and already peeled off.

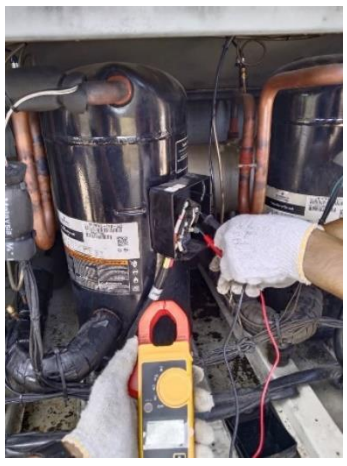
Do leak check on coil, found out have 5 coil already leak.

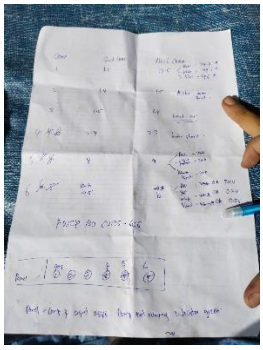
Inform to customer leak point area and coil need to be blank. Explain to customer effect if they blank this coil.

Come out with inspection report and give to customer.

Inspection

INSPECTION OF WCPU WORKING CONDITION AND RELIABILITY





Chronology

Reason of attendance: customer unable to reach room temperature setpoint

Job done:

Dismantle WCPU cover and inspect unit running condition

Inspect compressor status mechanically and electrically

Inspect on condenser and all refrigeration system

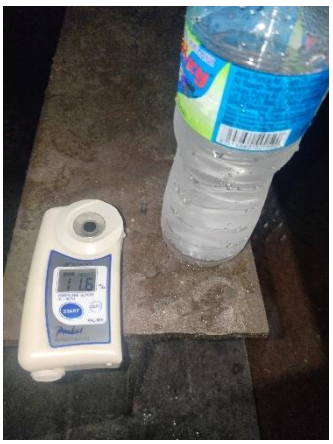
Inspect electrical panel

From inspection done, found out only 1 compressor unit can run in normal condition, other 5 unable to run in normal condition

Come out with inspection report and proposal to customer

Troubleshooting

TROUBLESHOOTING AMMONIA SYSTEM COMPRESSOR



Chronology

Reason of attendance: customer unable to run production cause compressor always turn off due too low suction pressure even with brine temperature out of range

Job done:

Monitor unit running condition

Try to drain out oil from evaporator. No more oil cause customer already drain in the morning.

During monitoring found out issue start only after brine temp reach -13degC.

Check glycol content inside brine, found out unstable reading between sample. Stop compressor and run brine in circulation mode. Suspect brine not mix up properly.

Run back unit after 1 hour and test run unit. Discuss with customer, customer will add glycol later in the morning.

Topup ammonia to make sure unit running with proper refrigerant charge.

Based on compressor running condition, recommend customer to do servicing. Customer agree cause unit already over due for servicing. They will arrange later during maintenance day

Project

PUMPDOWN AND EMPTY OUT LIQUID SUPPLY R22 SYSTEM FOR PIPING WORK

Chronology

Reason of attendance: customer request to empty out liquid supply to thermostatic expansion valve and to evaporator cause their contractor want to replace new valve.

Job done:

Pump down and do recovery cause customer using refrigerant R22.

Make sure no more pressure in related line and handover to customer contractor

Customer contractor cut and brazing new valve.

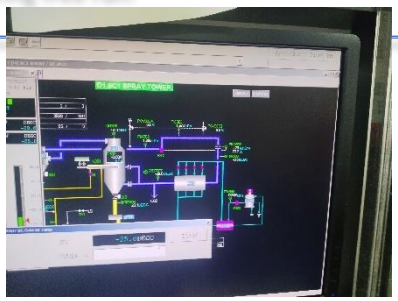
Assist customer contractor do leak check on new valve installed and braze pipe.

Flushing and vacuum affected area.

Test run unit and adjust thermostatic expansion valve installed setting.

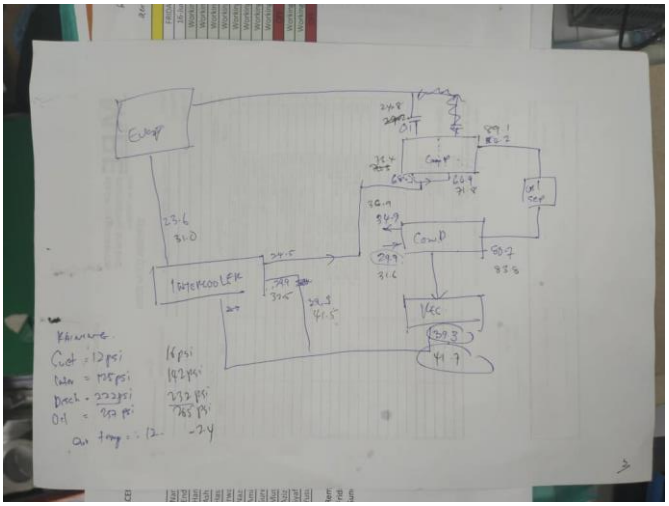
Test run unit without production. Monitor plant running condition without production.

Based on free run test, found out system not in perfect condition. Need to monitor during system running with full load. Inform to customer, system can run with production but not in perfect condition based on monitoring during free run.



Troubleshooting

EMERGENCY OUTCALL



Chronology

Reason of attendance: Customer request to troubleshoot SC2 system, still have issue after 2 contractor troubleshoot.

Job done:

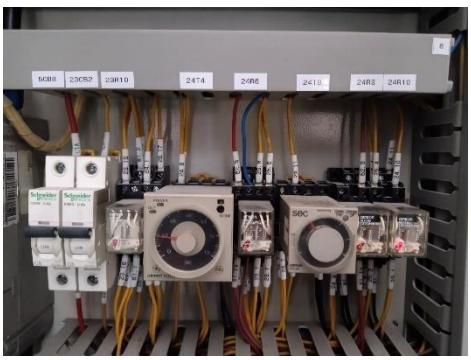
Test run unit, compressor always trip with unknown signal. Try to trace, found out from motor protection.

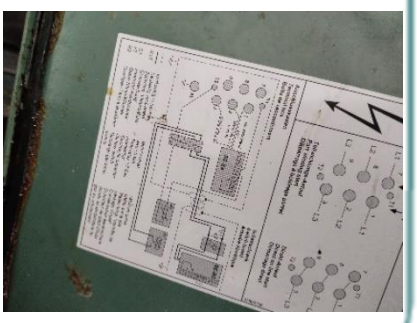
Check motor compressor running condition, running with high temperature. Motor running with slightly higher temperature than normal.

Found out also system running with low refrigerant charge. Charge freon. Continue monitor running condition, no more trip.

Based on discussion with customer, they will not service the motor. If any motor burn out, they will change with new unit.

Do full inspection at SC1 unit. Found out customer issue not cause by thermostatic expansion valve as per highlight by other contractor. But because of condenser. Customer will open and service





Project

VALVE REPLACEMENT

Chronology

Reason of attendance: Customer got a project to replace existing ICS + CVP to ICM motor. Customer request ARES to supply manpower for valve replacement to cut and weld the valve only.

Job done:

Affected area already pumpdown and depressurize by customer

Cut existing valve as per customer instructed and weld new valve as per customer instruction

Install new panel bracket to put new control panel

Based on customer request, help customer to do wire termination at panel

Assist customer do leak check on system

Help customer to test run unit

Project

VALVE UPGRADING

Chronology

Reason of attendance: customer got issue with defrosting. Existing pmlx valve bypassing, customer don't have spare part.

Job done:

Recommend to customer to replace existing pmlx to iclx valve without need for welding work

Supply icv body and iclx module to customer

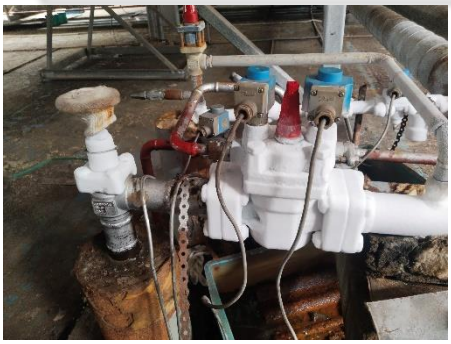
Pumpdown ammonia from valve station to receiver

Depressurize valve station

Dismantle existing pmlx and replace with new iclx valve

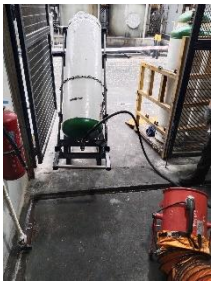
Vacuum and leak check valve station

Test run unit and monitor



Project

PREPARATION FOR DOSH INSPECTION, TESTING AND COMMISIONING



Chronology

Reason of attendance: customer need to empty out ammonia in system and prepared for annual DOSH inspection. System need to refill with ammonia refrigerant and commission back after DOSH inspection

Job done:

Isolate compressor and perfector from system. Drain out ammonia approximate 320kg ammonia to IBC tank from receiver, condenser and accumulator.

Flushing system using n2 gas. Dismantle manhole cover and safety relief valve for DOSH inspection.

Install back calibrated safety relief valve and manhole cover once DOSH inspection pass.

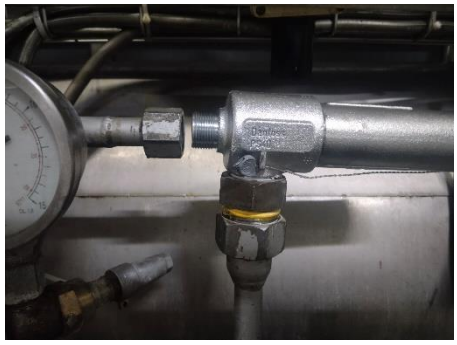
Conduct leak check and holding test at system using N2

Vacuum system and charge ammonia approximate 290kg.

Test run unit and run without production.

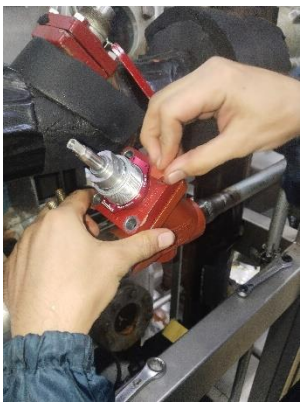
Project

SAFETY RELIEF VALVE REPLACEMENT








Chronology

Reason of attendance: customer got issue with safety relief valve opening below setpoint.

Job done:

Pumpdown perfector and depressurize perfector.

Some unit using old safety relief valve which require modification. Recommend to customer modification need to be done without required welding on site.

Replace 3 unit safety relief valve new model without piping modification. 1 unit using old part in good condition.

Leak check perfector. Found out leak at valve packing gland. Conduct repair job on the spot using part from customer.

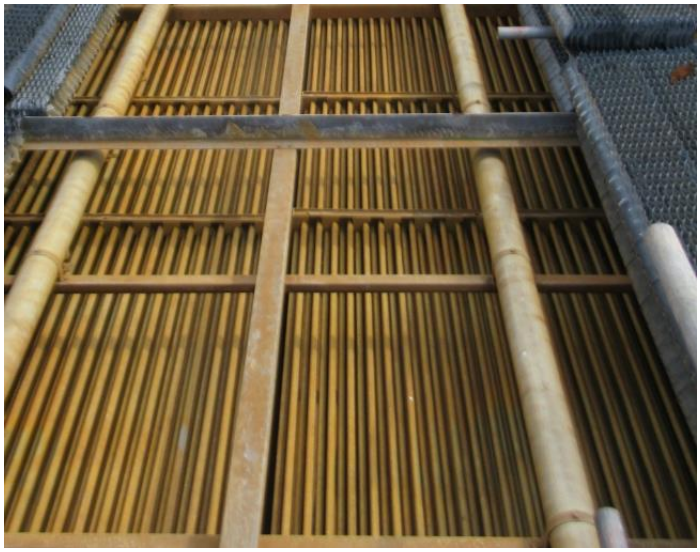
Vacuum perfector, leak check and normalize valve

Test run unit and monitor


Project

CONDENSER COIL CLEANING

BEFORE



Chronology

Customer found a lot of scaling on all condenser pipes. This cause increase of energy consumption for the refrigeration system due to higher compressor discharge pressure

Job done:

ARES perform chemical cleaning to remove the scaling.

Cost savings on energy consumption and extend equipment technical lifetime.

AFTER