



NICHE ENGINEERING SOLUTIONS

# AIR COOLED HEAT EXCHANGER SPECIALIST





## INTRODUCTION

Dynac Sdn Bhd looks back at a company history of more than 30 years experience. The company's wide range of products and services goes from oil and gas, chemical refineries, rig building industries to telecommunications.

Dynac's primary activities are in the oil and gas industry in the fields of HVAC Systems, Air Cooled Heat Exchangers, Cable Support System and Low Voltage Switchgear.

Dynac is supported by the most committed and qualified local work force. Dynac has located its head quarter and operation centre in Pasir Gudang (Johor) within a serving distance of the main fabricators for the marine and offshore industries.

We have a total of 20 acres of land in Johor to accommodate the growing demands in the oil and gas industry. Due to this strategic geographical location, which makes business activities easier to be carried out and reachable to neighbouring countries, which forms the hub of the dynamic global market.

Our commitment to the industry has compelled us to achieve international standard recognition which is why we chose ISO 9001:2008 and OHSAS 18001:2007 accreditation.



DYNAC SDN BHD main office / factory in Tanjung Langsat, Johor, Malaysia

## AIR COOLED HEAT EXCHANGER (ACHE)

Dynac ventures in the ACHE market for more than 10 years now and all activities which comprises of thermal, mechanical and structural design, fabrication, manufacturing and testing are fully done in-house at our factory in Pasir Gudang, Johor.

ACHE is the equipment used to reduce the temperature of process medium by transferring the heat to the surrounding air. ACHE is mainly used in offshore installations, refineries, petrochemical complexes and power generation plants. The heat transfer is achieved by forcing cold air through tube bundles and in the process the heat from hot process medium will be transferred to the colder air. To improve heat transfer process, the heat transfer surface is increased by introducing aluminium fins over the tubes.





## FABRICATION

We are proud to say that over these years, the facility upgrade has increased our fabrication and productivity to meet all our clients' requirements and needs. Fabrication of ACHE parts which includes the header box, tube bundle, plenum, and fan ring, drive assembly and support structure are done within our facility strictly controlled by our dedicated QA/QC department.



## TYPES OF ACHE

- Forced Draught
- Induced Draught
- Natural Draught
- Forced Draught with Air Recirculation

## HEADER BOX MATERIAL

- Carbon Steel
- Stainless Steel
- Duplex Stainless Steel
- Nickel Alloy 625 and 825

## CERTIFICATE OF AUTHORIZATION

- ASME "U" certificate of authorization to Manufacture Pressure Vessel
- The National Board certificate of authorization to apply "NB" mark and register Pressure Vessel

## ACHE DESIGN

A comprehensive and fundamental understanding of thermal and mechanical design allows Dynac to utilise the full range of design tools available such as HTRI® (Thermal Analysis), Autodesk Inventor Software (Finite Element Analysis), PV Elite (Pressure Vessel design) and Staad Pro (structural analysis) software to supplement relevant codes and standards. With vast combined team experience, Dynac is able to solve and provide solutions to any pressure vessel design challenges.

These factors combined with management dedication to invest in engineering design and manufacturing facility, Dynac is able to gain recognition as one of the leading supplier of ACHE in Malaysia.



## Fired Heaters

We are also manufacturer of customised system of boilers and heat transfer equipment since 1995 and has successfully delivered these equipment to the oil & gas industries in the Asian region.

In complementing our wide range of heat transfer equipment we now offer a complete line of process fired heater and related process equipment for Oil & Gas Sector in the Upstream Segment.

We are dedicated to design and manufacture fired heaters which meets the stringent requirements of the Oil & Gas Sector as per API 560.

Typical applications for these fired heaters include:

- Crude Heaters
- Vacuum Heaters
- Hot Oil Heaters
- Regeneration Gas Heaters
- Reactor Feed Heaters
- Reboilers
- Multi-Cell Reformers
- Delayed Cokers & Visbreakers
- Air Preheat Systems



## QUALITY ASSURANCE

The task of Dynac Quality Assurance System is to carry out tests and inspection for all our products starting from material receiving to the delivery of finished product. Our function and performance measurement are carried out on the basis of Inspection & Test Plan (ITP) or Project Quality Plan (PQP) and everything is documented for record. A product-independent Quality Assurance manual determines the organizational and technical process.

The result of this "Quality Management System" is our achievement in acquiring and maintaining the international certification ISO 9001:2008 and OHSAS 18001:2007. This is a prove of our commitment to high standards and quality to remain competitive in the oil and gas industry.



## Prominent Clients





**DYNAC**

DYNAC SDN BHD

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DYNAC ENGINEERING SDN BHD

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