



an introduction....

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the company.....

- **PT Alpha Omega Termal is a succession from CV Alpha Omega Thermal since Year 2019**
- **CV Alpha Omega established in 1978 as airconditioning design & contracting company.**
- **In 1988 started to design & manufacture Heat Exchangers , Blowers and Driers.**
- **Built a 3000 sqm Workshop on 4 Hectares land in 1991,which now grows to 13000 sqm to manufacture Various Process Heating & Drying Equipments.**

Certifications.....

- **Depnaker Certificate for Boiler & Pressure Vessel.**
- **Migas Certificate**
- **ISO 9001-2008**
- **ASME “U” & “S” Stamp.**



the workshop.....

the capabilities....

design and construction of :

heat exchangers

thermal fluid heaters

high pressure boilers

heat recovery equipments

fans and blowers

the products

Thermal Oil Heaters

We built various oil heaters :

- **Thermal Oil heaters with Gas/oil as fuel**
- **Thermal Oil heaters with biomass/coal as fuel**
- **Frying Oil Heaters for food industry**
- **Crude & Hot Oil Heater (API 560)**

Packaged Thermal Oil Heater



Packaged Thermal Oil Heater



Hot Oil Heater in Gas Field



solid fuel fired oil heater



Dual Fuel Fired Thermal Oil Heater



OSG

(Organic Steam Generator)

OSG is Unfired Steam Generator using Thermal Oil as heating medium.

Construction is horizontal or Vertical, depends on design. Working Pressure up to 70 bar , depends on temperature of the heating medium.

If using Stainless Steel material and high pressure steam as heating medium, it called Pure Steam Generator (PSG). Usually used in Pharmacy or Food Industry which need uncontamiinated steam for their process.

horizontal OSG



vertical OSG



air heaters

- Air Heater is used widely in process heating for Industries.
- We make all kind of Air Heaters, Fired and Unfired types.
- **Direct Fired Air Heaters** usually using Gas or Oil as fuel ,outlet temperature up to 800C, while **Indirect Fired Air Heaters** using Coal or Biomass as fuel with outlet temperature up to 450C and capacity up to 10.000.000 kCal/h
- Unfired Air Heaters using heating medium such as Hot Water,Steam or Thermal Fluid with maximum Temperature of hot air 230C ,capacity from 50.000 kCal to 2.000.000 kCal

Hot Oil 2 million kCal/h.



Indirect Fired Air heater 1 million kCal/h



Coal Indirect Fired 10 million kCal/h



Coal Indirect Fired 1 million kCal/h



Gas Direct Fired 3 million kCal/h



10.000.000 kCal/h Indirect fired Air Heater under installation



1.5 mio Indirect Coal Fired preassembled





**1.500.000 kCal/h x 300C air heater
under installation**



2.000.000 kcal/h x 250C airheater ready for run

Equipments for Oil & Gas industry

Heat Transfer Equipments in Gas field



Heat Transfer equipments for Condensate Recovery field



fin-fan air cooler



Heat Exchangers with ASME Design



Fired Heater from bird's eye view



Fired heater for crude oil (API 560)



Heat Recovery System

- Heat recovery can be obtained from many source of wasted heat e.g.:
- Exhaust Gas from Engine for Steam Generation
- Exhaust gas from Boiler for Feed Water preheater
- Exhaust Gas from Thermal Oil Heater for Combustion air preheater
- Exhaust gas from Kiln or Drier for Drying air preheater

Heat recovery system for refinery



Diesel Exhaust Gas Recovery Boiler



Diesel Heat Recovery Steam Generator



Air to air Heat Recovery



fan & blower

- **Capacity** : up to 200.000 m³/h
- **Static Pressure** : up to 18.000 Pa (Single stage)
up to 40.000 Pa (multistage)
- **Temperature** : up to 350 C



Extra High Pressure Fan :
18000 Pa ,single stage w/ radial blade
37000 Pa , 2 stage w/ radial blade



**Stainless Steel 317 Backward
Curved blades Fan for Chemical
Industry , Direct drive by 600 kW
x 950 Rpm motor**

fan wheel balancing





preparation before test

installation...

