MECHMAR
www.mechmar.com.my

# PACKAGE STEAM BOILER

The most popular range of boilers in the market.
Suitable for oil, gas or dual fuel firing with high efficiency level and excellent heat transfer capabilities.

High output for given volume and weight.
It is capable to start quickly from cold without thermal stress.
Standard working pressures are 150 psi and 250 psi.
Designed and manufactured to latest British Standard Specifications.

Standard Steam Capacities
- 1,250 - 24,000 lb / hr
- (567 - 10,886 kg / hr)

Working Pressure
- 150 psig (10.34 bag)
- 250 psig (17.24 bag)

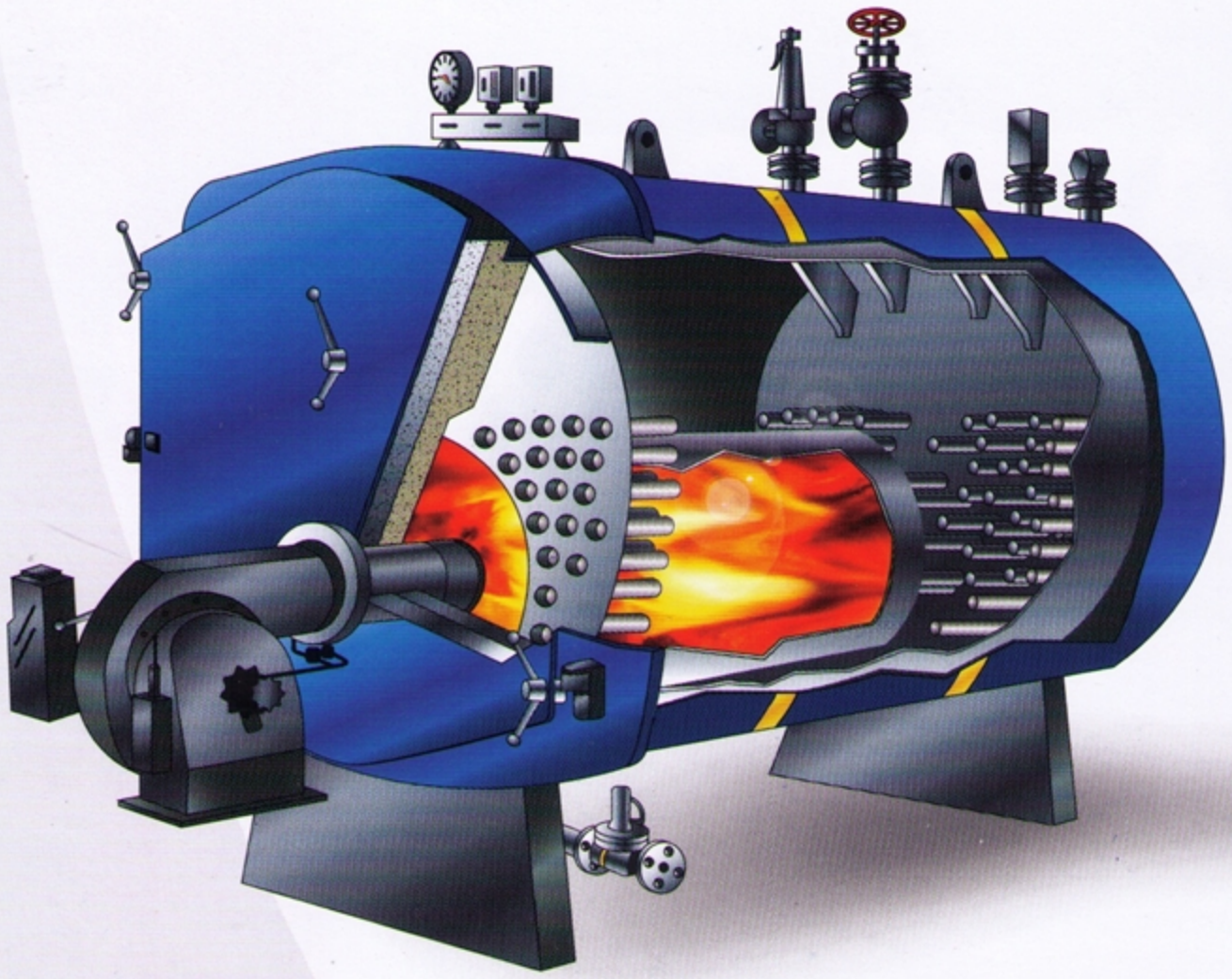
LLOYD'S REGISTER QUALITY ASSURANCE · ISO9002 · UKAS QUALITY MANAGEMENT 001

TITAN AS

MECHMAR

# TITAN AS

## Package Steam Boiler



**MECHMAR BOILERS SDN BHD** a wholly owned sudsidiary of **MECHMAR CORPORATION (M) BERHAD**, the market leader in Malaysia for boiler manufacturing achieved yet another distinction with the award of ISO 9002 certification by Lloyd's Register of Quality Assurance making it the first boiler manufacturing company in Malaysia to attain this recognition.

With Lloyd's Class I certification for its product and ISO 9002 certification for its quality management system, **MECHMAR BOILERS SDN BHD** is now among the elite group of boiler manufacturing company in the world. For its high quality workmanship and consistency in quality, **MECHMAR BOILERS SDN BHD** is already a holder of CLASS I fabricator licence for pressure vessel manufacturing from Lloyd's Register of Shipping since 1985.

**MECHMAR BOILERS SDN BHD** started operation at Lot 14, Jalan Timah, Pasir Gudang Industrial Estate, Johore in 1977 and to date have produced more than 3000 units of boilers ranging from 500 lb to above 132,000 lb capacity of steam per hour. It also manufacturers Hot Water Boilers, Thermal Fluid Heaters and other pressure vessel.

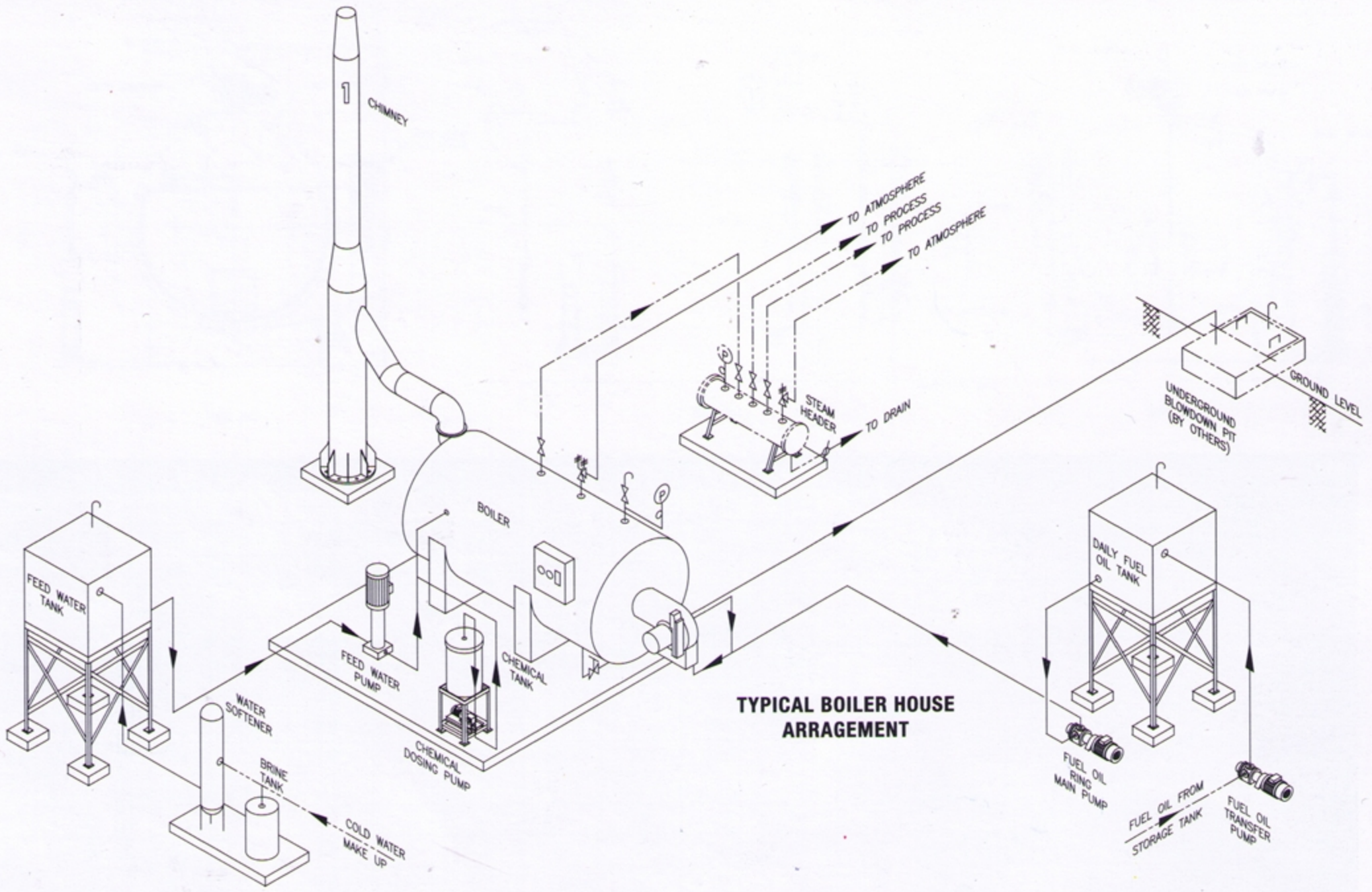
The products are developed and marketed by **MECHMAR COCHRAN BOILERS (M) SDN BHD**, another wholly owned subsidiary of **MECHMAR CORPORATION (M) BHD.**

**MECHMAR COCHRAN BOILERS (M) SDN BHD** markets a wide range of boilers, thermal oil heaters, steam plant and power plant installation. It operate from offices and service centres in Shah Alam, Johore and Prai to ensure excellent after sales service and prompt supply of spares.

THE TITAN PACKAGE STEAM BOILER MODEL 'AS' IS DESIGNED TO THE LATEST BRITISH STANDARD 2790. THE BOILER ADOPTS THE REVERSE-FLAME PRINCIPLE OF COMBUSTION WHERE THE HOT GASES MAKE 2 PASSES WITHIN THE PRESSURISED COMBUSTION CHAMBER AND THE THIRD AND FINAL PASS THROUGH THE FIRE TUBES ON ITS EXIT TO THE CHIMNEY.

THE COMBUSTION CHAMBER IS SUPPORTED BY STAY BARS AT ITS REAR END. (IT STANDS CLEAR OF THE BOILER DRUM BACK PLATE, THUS GIVING RISE TO THE WET-BACK DESIGN.) THIS DESIGN FEATURE NOT ONLY INCREASES THE HEATING SURFACE, BUT ALSO REDUCES UNNECESSARY REFRACTORY-WORK.

- Full wet back design without refractory lining on the rear portion of the boiler → minimise the radiation heat loss and refractory maintenance.
- Big combustion chamber allows the flame to make two complete passes inside the chamber maximises the heat transfer by radiation inside the furnace making it more responsive to load fluctuations.
- Spirals in the convection side enhance the heat transfer rate.
- Bigger furnace volume to minimise unburned combustible loss thus ensure high combustion efficiency.




**TYPICAL BOILER HOUSE ARRAGEMENT**

## CONSTRUCTION FEATURES

- Although the boiler is compact in construction, it posses a large space above the top row of fire-tubes for easy access during internal inspection.
- Accessibility to the fire-side is by way of the hinge-mounted front door. When the door is swung open, the combustion chamber and the fire-tubes are full view for cleaning and inspection. Unlike other conventional three pass boilers, the combustion chamber is built larger so that there is flexibility in the choice of using either fuel oil or gas burner.
- The boiler is manufactured with the approval of the factory and machinery department under the stringent third party inspection Lloyd's Register of Shipping, hence ensuring a high standard of quality and reliability.

## BURNER

- Boilers are supplied with high/low or modulating burners to burn fuel oil, gases or dual fuel. Burner is pressure jet atomising type.

## AFTER SALES SERVICES

- All steam boilers are backed by our nationwide team of service technicians.
- Services include commissioning, service contracts, breakdown calls, boiler/burner servicing and routine maintenance.
- Spare parts for all boiler types are available through our service department.