

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)



TITAN AS



MECHMAR BOILERS SDN BHD a wholly owned subsidiary 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 manufactures Hot Water Boilers, Thermal Fluid Heaters and other pressure vessel.

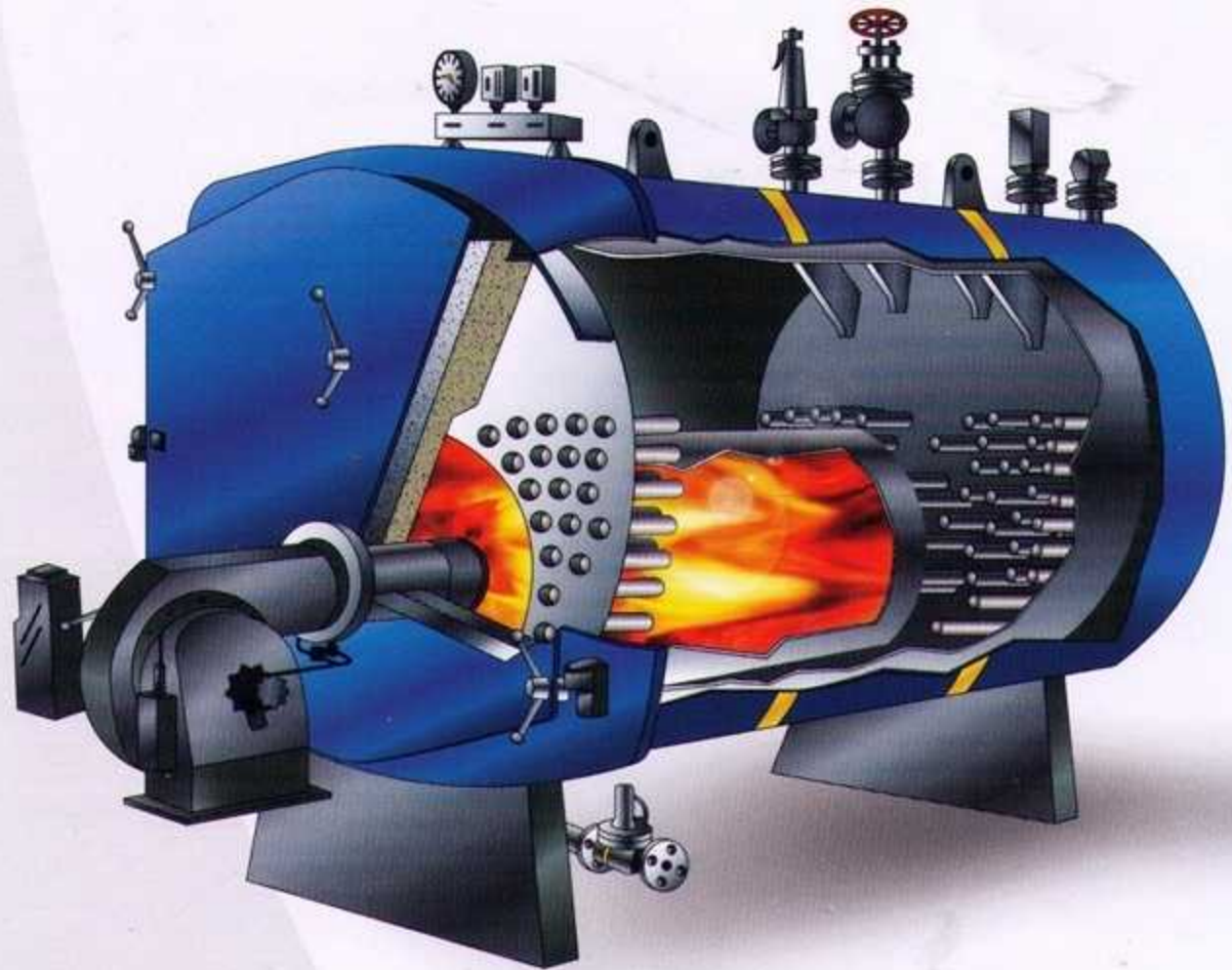
The products are developed and marketed by **MECHMAR COCHRAN BOILERS (M) SDN BHD**, another wholly owned subsidiary of **MECHMAR CORPORATION (M) BHD**.

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.



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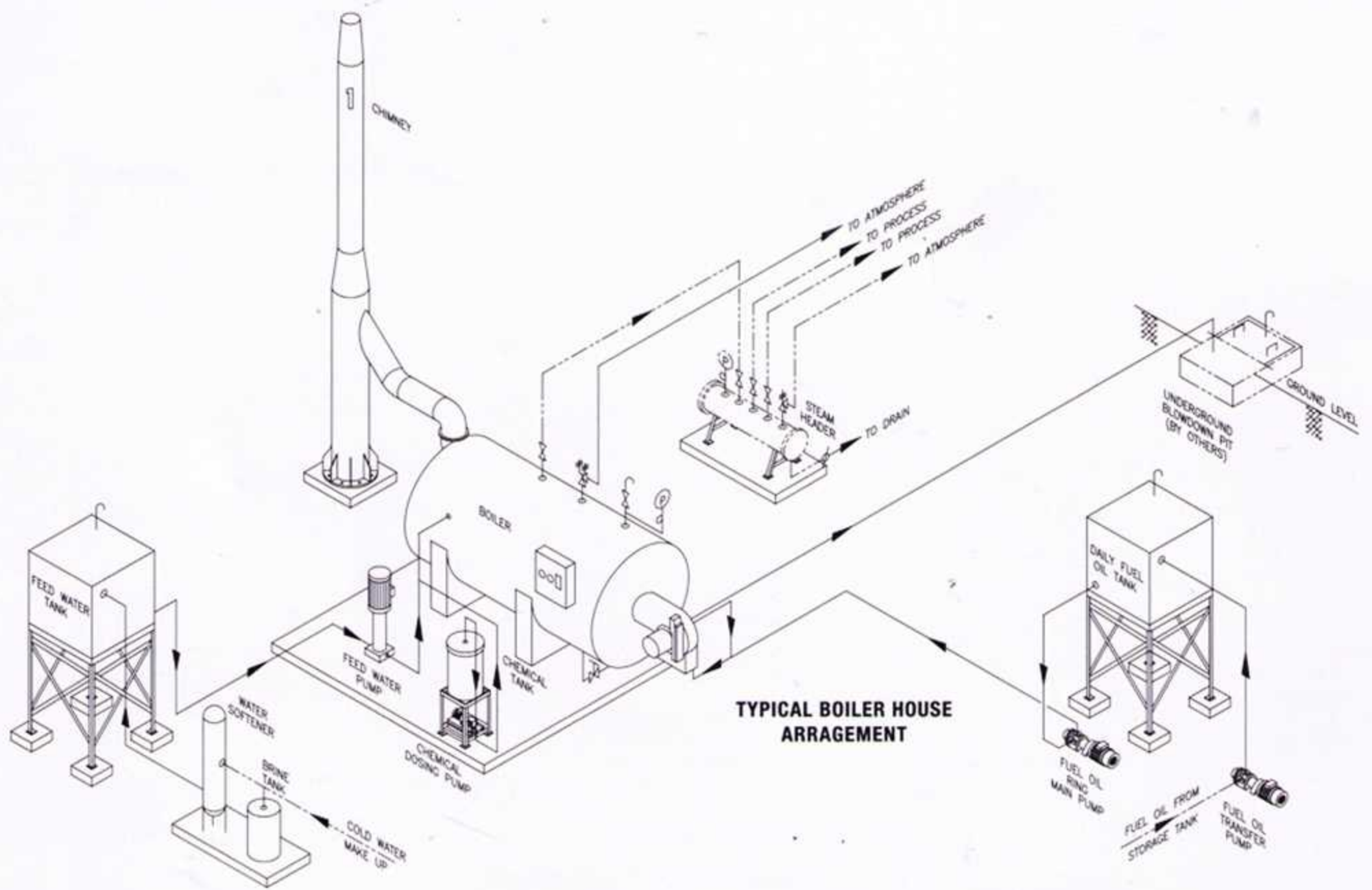
Package Steam Boiler



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.



CONSTRUCTION FEATURES

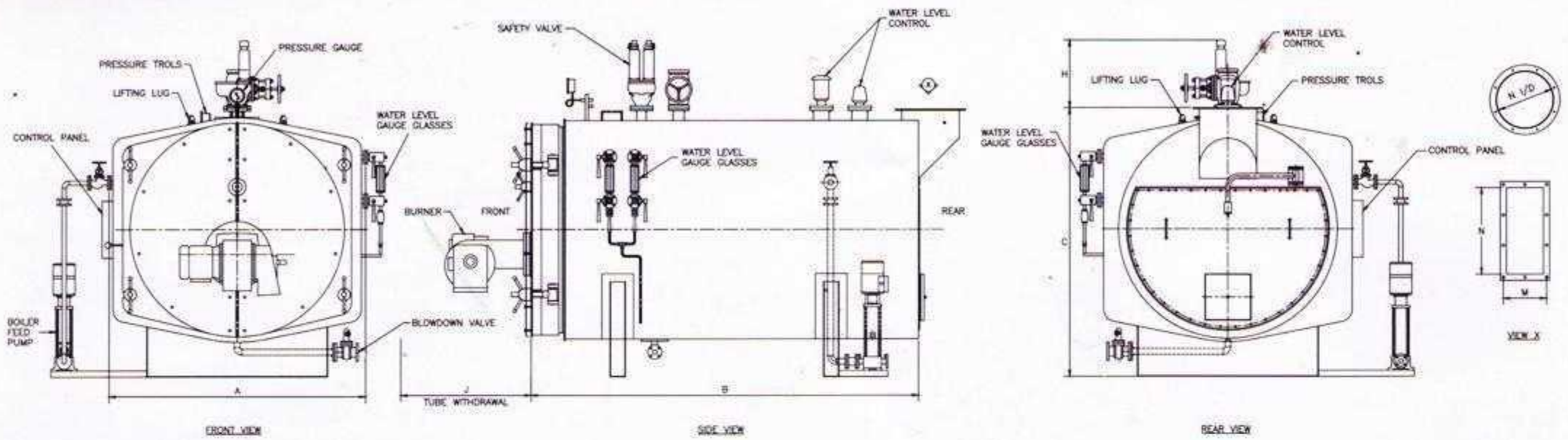
- Although the boiler is compact in construction, it possesses a large space above the top row of fire-tubes for easy access during internal inspection.
- Accessibility to the fire-side is by way of the hinge-mounted front door. When the door is swung open, the combustion chamber and the fire-tubes are 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.



BOILER MODEL		AS125	AS200	AS350	AS500	AS650	AS800	AS1000	AS1200	AS1400	AS1600	AS2000	AS2400	
BOILER CAPACITY	lbs/hr F&A 212°F	1250	2000	3500	5000	6500	8000	10000	12000	14000	16000	20000	24000	
	kg/hr F&A 100°C	567	907	1588	2268	2948	3629	4536	5443	6350	7258	9072	10886	
DIMENSIONS	'A'	mm	1414	1582	1869	1998	2031	2095	2306	2366	2577	2809	3166	
	'B'	mm	2182	2352	2612	3117	3442	3617	4125	4146	4228	4401	4738	5328
	'C'	mm	1650	1648	2008	2187	2364	2440	2626	2713	3010	3151	3164	3654
	'M'	mm	254 I/D	305 I/D	355 I/D	457 I/D	508 I/D	558 I/D	400	405	408	445	538	535
	'N'	mm	-	-	-	-	-	-	850	990	1110	1168	1222	1510
	'H'	mm	389	389	389	389	389	498	498	498	570	570	670	670
	'J'	mm	2285	2285	2590	3100	3434	3555	3960	3960	4270	4270	4875	5000
MAIN STEAM VALVE SIZE	NB	50	50	80	80	100	100	125	125	125	125	150	150	
SAFETY VALVE SIZE	DN	40	40	40	40	40	50	50	50	65	65	80	80	
SAFETY VALVE OUTLET	NB	80	80	80	80	80	100	100	100	125	125	150	150	
BLOWDOWN VALVE SIZE	NB	25	25	25	40	40	40	40	40	40	50	50	50	
FEED WATER PUMP INLET	NB	32	32	32	32	32	32	32	40	40	40	50	50	
FEED WATER PUMP MOTOR	kW	1.1	1.1	2.2	2.2	3.0	4.0	4.0	4.0	5.5	5.5	11.0	11.0	
FUEL OIL														
- PUMP INLET	BSP	25	25	25	25	25	25	25	25	25	25	25	25	
- RETURN	BSP	20	20	20	20	20	20	20	20	20	20	20	20	
- SUPPLY PIPE	BSP, (MIN.)	40	40	40	40	50	50	65	65	65	65	65	65	
RECOMMENDED CHIMNEY DIAMETER	mm	254	305	355	457	457	558	635	710	770	770	910	970	
BOILER DRY WEIGHT	kg	3940	4500	4650	6020	7580	8800	10940	11580	12910	14450	15900	21920	
BOILER WEIGHT AT NWL	kg	4880	5620	7010	8870	11030	12930	16500	17350	19290	21680	24400	34700	

SELANGOR

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