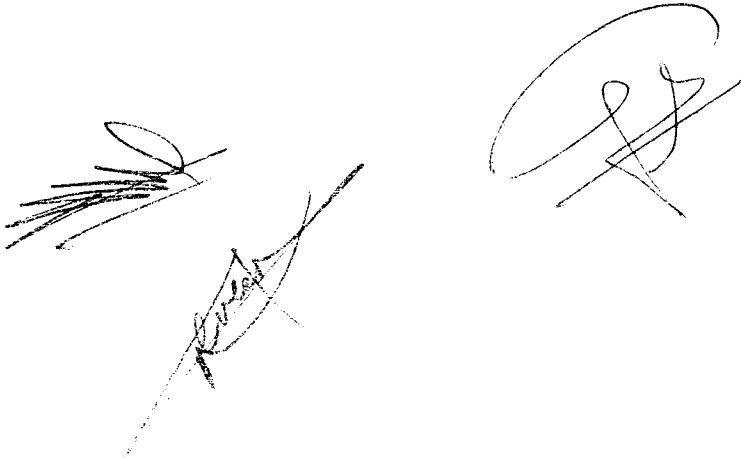


بسم الله الرحمن الرحيم

الشروط الخاصة

عطاء توريد وتركيب بويلر بخار قدرة (1000Kg/hr) لمجمع الاميرة عائشة/ماركا


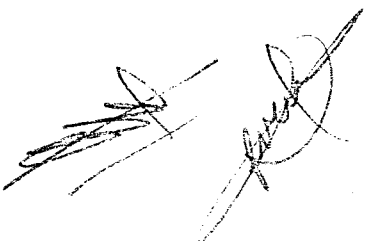
١. على الشركة المتقدمة للعطاء زيارة الموقع للكشف مسبقا على النظام القائم وذلك لتحديد فك البويلر القديم ونقله وتركيب البويلر الجديد وكافة ملحقاته وربط خطوطه مع الشبكة القائمة وتحديد مصادر الماء والكهرباء وملامتها مع البويلر الجديد.
٢. على الشركة المتقدمة للعطاء تقديم تعهد بتوفير جميع القطع اللازمة للبويلر لمدة لا تقل عن عشر سنوات .
٣. على الشركة المتقدمة للعطاء تقديم كفالة صيانة شاملة (بويلر + حارقة + خزان) لمدة سنة من تاريخ الاستلام بحيث تشمل الكفالة جميع انواع الصيانة الدورية والوقائية او اي اعمال فنية اخرى على البويلر وملحقاته .
٤. على الشركة المتقدمة للعطاء فك ونقل البويلر القديم الى موقع يحدد لاحقا.
٥. على الشركة المتقدمة للعطاء تقديم شهادات منشأ تضمّن بان كافة ملحقات البويلر والحارقة والانسوارات صناعة تركيه او اوروبيه او امريكيه .
٦. تتعهد الشركة المتقدمة للعطاء بتقديم الشهادات الخطية اللازمة لمطابقة المواصفات القياسية لبيولرات البخار وملحقاته .
٧. تلتزم الشركة بعقد دورة تدريبية لفنيين عدد (٣) تشمل كافة تعليمات التشغيل والصيانة الدورية وتبديل قطع الغيار اللازمة.



**Marka Hospital - STEAM BOILER**

**PRODUCTS**

- 1.1 STEAM BOILER
- 1.2 Light Oil BURNER
- 1.3 BOILER FEED WATER PUMPS
- 1.4 CONDENSATE TANK
- 1.5 BLOW DOWN VESSEL
- 1.6 BOILER CONTROL PANEL

A large, stylized handwritten signature in black ink, located in the lower right quadrant of the page.A smaller, more complex handwritten signature in black ink, located in the lower left quadrant of the page.

الواصفات الفنية  
جولار مجمع الاميرة عائشة

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**PRODUCTS**
**1.1 STEAM BOILER**

Boiler shall be Manufactured according to 97/23 Pressure Equipment Directive and EN 12953. Cylindrical type, three passes (Actual Three Pass), **(Reverse Flame is not Accepted)**, wet back combustion chamber, fire and smoke tubes are stabilized to the tube sheet by weld and constructed on stable steel base, includes manholes, hand holes and insulated with 100cm rock wool over 1 mm painted galvanize plate. Furnace CORRUGATED type, tube sheets are dishend, Boiler Efficiency is Not less than 88%.

Working pressure of boiler is 10 bars and test pressure to be 1.5 times the working pressure.

**MANUFACTURING TECHNIQUE OF THE BOILER:**

- Manufactured according to 97/23 Pressure Equipment Directive and EN 12953.
- Boiler steel: Main shell and all the heat facing surfaces manufacturing from EN 100028 (DIN 17155) P 235 GH - P 265 GH - 295 GH material.
- Boiler Tube: Smoke and flame tubes, muff tubes, manufacturing from EN 10216-5 (DIN 17175) seamless steel material.
- Stress relieving process according to EN 12953 - EN 12952. Stress relieving process performed at 620 °C for 6 hours and in 1 hour temperature must be constant. Welding's are controlled by X-ray methods.

**QUALITY CONTROL CERTIFICATES**

- Plates and tubes according to EN 10204 3.1.B or 3.1.C certificated.
- ISO 9001:2000 Quality Management System ( TUV SUDWEST )
- Welder's Certificate EN 287/1 ( TUV SUDWEST )

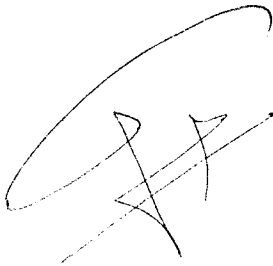
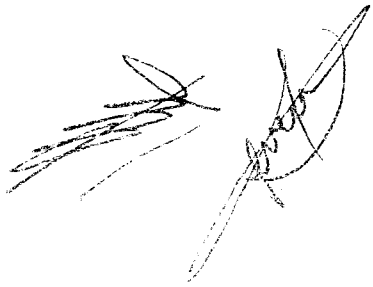
Boiler shall be supplied with:

- Globe Main Steam Valve
- Water Level Control System Electrode Type
- Second Low Level Alarm
- Safety Valve - Full Lift QTY 2
- Water Level Indicator (reflex glass) QTY 2
- Feed Water Inlet Steam Valve
- Feed Water Check Valve
- Bottom Blow Down Valve
- Surface Blow Down Valve
- Pressure switch
- Automatic Below Down Valve

Boiler capacity: 1000 kg/h (1 ton/h)

Working pressure: 10 bar

Quantities: One numbers.

**1.2 LIGHT OIL BURNER**

Integral forced draught **Two Stage** burner suitable for light oil (Diesel Burner)

Shall be of direct light oil ignition with low fire start and pressure atomization, burners fit a control Panel which includes the control box and a mimic diagram with lamps showing the sequential Stages of burner operation, Mechanical Atomization, Burner shall supply with suitable Nozzle, Hoses, Filter, All Related Accessories for Right and safe operation.

**European directives:**

- Directive 2006/95/EC on low voltage;

-

Directive 2004/108/

CEE on electromagnetic compatibility

**Harmonized standards:**

-CEI EN 60335-1(Household and similar electrical appliances - Safety.

Part 1: General requirements;

- EN 50165 (Electrical equipment of non-electric appliances for household and similar purposes. Safety requirements.

**National standards :**

-UNI 7824: Monobloc nebulizer burners for liquid fuels. Characteristics and test methods

Burner capacities shall be compatible with boiler capacity, efficiency and back pressure.

**1.3 BOILER FEED WATER PUMPS**

Monobloc multi-stage vertical non self-priming high pressure centrifugal pump of inline design. Impellers, diffusers and all parts in contact with the fluid made of stainless steel. Bi-directional mechanical seal directly close-coupled to the drive motor. Separate lantern mounted axial thrust balancing roller bearings.

Pumps shall be supplied with Inlet and outlet valves, Strainer, Check valves and Pressure gage.

**1.4 CONDENSATE TANK with Atmosperic Semi- Deaeror**

Made up of steel plate, will be cylindrical includes low level electrode, hot and cold water inlet, level indicator, feeding pump and air mountings. With floater control, coated with hot deep galvanize to prevent corrosion.

atmospheric semi-deaerators are designed to heat boiler feed water and to reduce oxygen and carbon dioxide (oxygen values in the feed water of less than 1,6mg/l , can be achieved). Remaining oxygen can be completely removed using oxygen scavenging chemicals.

Basically, the complete system consists of a storage vessel, a deaeration head section and a vent.

Capacity 1000 Liter

**CONDENSE TANK ACCESSORIES:**

- Self-Acting Valve
- Pressure Reducer
- Isolation Valve
- Strainer
- Level Floater
- Low Level Electrode
- Water Level Indicator & Its Tap
- Pump Feeding Valve
- Drain Valve

- Thermometer
- 

### 1.5 BLOW DOWN VESSEL

Manufactured from St. 37 quality steel, after manufacturing will be hot galvanized, vessel will be cylindrical and vertical, including all the essential muffs.

Capacity 300 Liter

#### BLOWDOWN TANK ACCESSORIES:

- Self-Acting Valve
- Pressure Reducer
- Isolation Valve
- Strainer
- Level Gauge and Connection Valves
- Drain Valve

### 1.6 BOILER CONTROL PANEL

To control, manage and start the system from a center, box type control panel including: thermic contactors to start motors. Safety system: In the case of high level steam pressure, low level water, burner will stop.

In the case of high water level, low water level, feeding pumps will stop.

Warning types: With horn and lighting signals.

