Domina Plus B
Gauteng Tender
Tabletop Autoclave

GT /GDH/169/2013 – REQUEST FOR PROPOSAL FOR THE SUPPLY, INSTALLATION, COMMISSIONING OF THE EQUIPMENT FOR HEALTH AND PRISON SERVICES

PERIOD: 36 Months

Bid: GT /GDH/1692013 dated 06 January 2014
Enquiries: Dumisani Francisco  
Tel: (011) 355 3567  
Fax: 086 4200682  
03 September 2014

Directors  
Trojan Medical  
P O Box 477  
Modderfontein  
1645

TEL: 011 452 3839  
FAX: 086 320 529

Attention: Candice Nash.

GT /GDH/ 169 /2013 – REQUEST FOR PROPOSAL FOR THE SUPPLY, INSTALLATION, COMMISSIONING OF THE DENTAL EQUIPMENT FOR HEALTH AND PRISON SERVICES

PERIOD: 36 Months

Your bid GT /GDH/169/2013 dated 06 January 2014 has been accepted, subject to all the terms and conditions embodied therein, for the supply of items indicated hereunder.

This letter of acceptance constitutes a binding contract. However, no deliveries should be effected until a written official order has been received. This order would also, inter alia, indicate delivery instructions.

NB: The quantities stated in this letter of acceptance can in no way be regarded as an absolute guarantee of the quantities to be purchased, as requirements may change. Off take of these quantities could be over a period not exceeding 7 months.

This award is however, subject to the following conditions:

1. The unit price is fixed and not subject to ROE (rate of exchange) variations.
2. The maintenance portion will be subject to ROE (rate of exchange) only. All other costs will be fixed. The cost of the maintenance, which shall become effective after the completion of the 2 year guarantee period, shall be paid on an equal monthly basis in arrears over the 5 years.
3. The Full Complete Service and Maintenance Contract will be all inclusive with no exclusions and will include, amongst others, software and hardware upgrades.
4. Rate Of Exchange Adjustments will only be effected if the rate varies by +/- 5 percent or more.
5. A 98% uptime is guaranteed for the warranty period of 2 (two) years as well as the 5(five) years maintenance period, with uptime as defined in the full complete service and maintenance contract.
6. The detailed pricing and sites awarded to you are noted in the attached pricing schedule (Document 3)

PARTICULARS OF ACCEPTED OFFER:

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Bid Price</th>
<th>Brand</th>
<th>Delivery Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE SUPPLY, INSTALLATION, COMMISSIONING OF THE DENTAL AUTOCLAVE AS SET OUT IN THE ATTACHED PRICING SCHEDULE</td>
<td>R 48 970.00 Inclusive of VAT</td>
<td>Domina Plus B</td>
<td>8 weeks after receipt of purchase order</td>
</tr>
</tbody>
</table>

See attached pricing schedule or full details of the award.

Yours faithfully,

GEORGE MAHLANGU (CFO)

CFO

Date 09/01/2014

I accept the terms and conditions contained in this letter of acceptance.

Signature: Candice Nash

Print Name: Candice Nash

Date: 12/01/2014

37 Sauer Street, Private Bag X085, Marshalltown, 2107  
Tel: No: +27 11 355 3000 /7600
Motivation for DOMINA PLUS B Autoclave
(Internationally acclaimed)

WORLDWIDE CLASS B AUTOCLAVE OF CHOICE
DENTAL X DOMINA PLUS class B Autoclave offers rapid, efficient and validated sterilization.
It is an invaluable tool in every unit of the hospital as well as pre-hospital areas, dental clinics etc.

Special features include:
• CLASS B Autoclave – able to autoclave all objects, Solid, porous, hollow, packed or unpacked
• It is simple to use by all levels of personnel. Select programme – press START.
• Fully automatic – the entire cycle is controlled by a powerful microprocessor
• Automatic STOP at the end of the cycle prevents overheating and fire risk.
• Constructed of advanced materials + components.
• The copper chamber prevents “thermic bounce” which makes the instruments brittle, blunt and shortens the life of the instruments.
• It is equipped with a powerful pump to ensure TOTAL air expulsion.
• Capable of carrying out both Bowie Dick and Helix tests.
• Negative pressure drying cycle ensures perfect drying.
• Has 2 standard cycles, a flash cycle, 5 customised cycles and 2 test cycles.
• It has an integrated printer + an optional label printer

Safety features include:
• Triple safety door
• 99.8% of the air is biologically clean
• Cross check of temperature + pressure values.
• Auto Diagnosis+ malfunction detection system
• Complies with ISO: CE +Vision 2000 norms

Salient points
• DOMINA PLUS B is the product of choice in the WC: Medicross Clinics and is on the Gauteng GT169 Tender
• The DOMINA PLUS B is the only Autoclave approved by all the dental handpiece manufacturers

Company Support
• Trojan Medical is a well-established 20 year old company with a full service facility.
• Trojan Medical offers ongoing user training + support for the lifespan of the unit.
• All consumables are available from Trojan Medical.

Company Details
TROJAN MEDICAL PTY LTD
Tel 0861 788 739 / Fax 0861 329 629 / ryan@trojanmedical.co.za
The growing concern for the spreading of infection diseases and the introduction of new Norms have determined a greater interest for sterilization.

The norm EN 13060 indicates the criteria that, in the future, will guide the manufacturing and use of small steam autoclaves.

The several revisions to the project and the free interpretation of the classifications proposed (B, S, and N) have generated great confusion and the user is sometimes disoriented when choosing an autoclave.

For more than 20 years, Dental X is active in sterilization and dedicates important resources in research and development of innovative solutions for improving the performances and reliability.

The new technologies developed by Dental X, particularly the special heating system and the air exhaust system, have made higher performances possible with very high reliability.

The choice to produce in a state of supreme quality, certified according to the ISO 9001/Vision 2000 norms, enables us to offer absolute quality guarantees for the products as for the services.

Dental X offers a range of innovative solutions, reliable and convenient, capable to solve at best the sterilization needs of a modern medical office.

Class B autoclaves with vacuum pump
- Domina Plus B
- Aptica Plus B

Class S autoclaves with thermo-dynamic vacuum and drying pump
- Atoma Plus
Dental X ...the sterilization company

Dental X ...a partner with much experience
Domina Plus B

The state of the art in sterilization

- The Domina sterilization systems are the state of the art in the sterilization field.
- Made out of advanced materials and components, the Domina sterilization systems combine, in a compact and elegant design, the performances of the most advanced hospital sterilization units.

The Domina systems are equipped with a powerful vacuum pump which enables the total air expulsion. Thanks to the pump’s action, it is possible to sterilize in a reliably way any kind of material, including the internal surfaces of handpieces. Moreover, the pump generates a forced ventilation and a perfect drying up.

Complying with what requested by the norms, Domina systems can carry out the Bowie & Dick test and the Helix test (Domina Plus).

The control processes and the rigorous compliance to the norms guarantee the absolute sterilization safety.

- Triple safety door
- Cross-check of pressure and temperature values
- Maximum parameters stability
- Computerized control

The adoption of the most innovative computer technique has made sterilization a totally automatic process. The whole cycle is controlled, step by step, by a powerful microprocessor and, at the end of the cycle, the system stops automatically.

The auto-diagnosis and the automatic malfunction detection system guarantee continuous optimal working conditions. The 8 pre-stored programs and the possibility to freely set the parameters ensure simple use and maximum versatility.

The possibility to connect the autoclave to a printer or to a PC allows the certification of the sterilization process efficacy. Moreover, the computer allows the improvement of the quality of tests and of the technical assistance which, also through the use of a modem, result to be faster and more economic.

Type B sterilization

![Image of autoclave with graph showing sterilization process]

**Domina Plus B**

Temperature 134°C - Pressure 2.04

- 1.0

Time
A new quality standard

Domina Plus B printer ..... the rapid, efficient, safe and “validated” sterilization
Process Evaluation System
The process evaluation system guarantees the sterilization safety. It is based on the cross-check of the pressure and temperature parameters and enables to guarantee the quality of the saturated steam and to control, in a safer way, the perfect functionality of the heating system and chamber pressurizing. The graphic shows the relation temperature-pressure and the alterations in the presence of air.

Perfect Drying
A perfect drying is fundamental in order to reduce corrosion and rust on instruments and to maintain the sterility of wrapped up material. The special heating system together with a forced ventilation system ensure a better and faster drying up without altering the surgical instruments characteristics.

Rapidity
The speed of the sterilization cycle is an important factor that allows the optimization of the work. A special flash cycle enables a rapid sterilization, under high vacuum, in less than 20 minutes.

Reliability
The experience and wide diffusion, throughout the world, of the Domina sterilization systems, together with the use of the most advanced technologies and components of quality, made the autoclaves of the new 2003 series to reach a higher reliability level.
Connection to the computer
The possibility to connect the autoclave to a computer enables the improvement of the performance and reliability of autoclaves. Thanks to the computerized control, the tests are carried out in a more detailed and precise way and the technical service is faster and more efficient.

Since 2001, all Dental X systems make use of a software calibration system that can also be adjusted via modem.

Connection to the printer
The autoclaves Dental X can also be supplied with a printer integrated in the control panel. Thanks to the printer and to the correct management of the sterilization protocol, it is possible to guarantee the retrieval of the sterilization cycles.

All models, also if without the integrated printer, can be connected to an external printer.

Steril management system
In line with the specifications of norms EN 554, all Dental X systems allow the archiving of the sterilization data directly on the PC.

In this way, the total retrieval of cycles is assured, thus eliminating possible human errors and waste of time.

The Steril management system enables an easy connection to the computer also for those who haven't a PC in the sterilization room.

The system manages also the printing of labels to be applied to the envelopes for the complete retrieval of the process.

The connection to the computer is made through an interface (DATA LOG) equipped with an independent memory capable of simultaneously manage the data of 2 autoclaves and the net connection of a maximum of 32 autoclaves.

Connection diagram of the Steril Management System

USB Log
In order to easily document effective "cycle traceability", the Domina Plus B features a new optional USB log connection. The USB log allows the staff to record all information about the sterilization cycles on a USB flash drive (2.0 GB). All cycles are recorded with progressive numbers and can be opened or printed by using existing text software. No PC wire connections are required.

USB flash drive

Data Log

Archiving and cycle retrieval without waste of time
Domina Plus B

Scope …quality and innovation

- **Total automation**
  All Dental X models are totally automatic and equipped with preset programs. It is only necessary to choose a program and press the Start button to start the cycle. The cycle is carried out under the microprocessor control, without need any further action, and at the end of the cycle the autoclave switches off automatically, enabling also the night cycle without the risk of overheating. The operator has always access to a programming menu with which he can freely set parameters to guarantee maximum versatility. All cycle phases and indications are clearly visualized on the display.
  
  All models are equipped with self-diagnostic and trouble-shooting features to simplify maintenance operations.

- **Accelerated and balanced heating**
  The heating system is the heart of the autoclave. Dental X has developed an advanced heating system capable of controlling more accurately and homogeneously the temperature inside the sterilization chamber. The special adhesive electrical resistances, applied directly on the chamber, guarantee a much higher efficiency than with the classic strip resistances. The possibility to differentially heat-up the resistances below and above enables to better adjust the steam flow and to eliminate thermal variations. Three different temperature sensors allow the control not only of the steam temperature but also of the surface temperature, thus avoiding thermal shocks to the instrumentation placed near the chamber surfaces. The sterilization chamber, made out of nickel plated copper, has a thermal conductance higher than for steel chambers, enabling to a more precise and homogeneous control of the internal temperature. All these features, managed by an extremely advanced software, result in superior performances.

- **Pre and Post vacuum system**
  The Domina systems utilize a powerful pump for the air exhaust. The pump has two important functions: One is to exhaust the air before sterilization in order to guarantee the sterilization efficiency also for the most complicated instruments. In Domina Plus model, the pump operates in a fractionated manner while in Domina model the pump operates in a continuous way. In the drying up phase, the pump makes an important ventilation action through a bacteriological filter. Thanks to this action, it is possible to obtain a perfect drying up for any type of load. The drying up is an essential factor in order to preserve the sterility of the wrapped up instruments and is also a requirement of the new norms. In the Dental X systems, the pumps have been developed and made directly by Dental X to operate both in the presence of air or water and at low and high temperatures.

- **Useful volume of the chamber.**
  Thanks to the enveloping support and to the special perforated trays, it is possible to use a larger chamber volume and it is consequently possible to sterilize a larger number of instruments than with systems with similar chambers but equipped with standard trays (+20%).

---

**Thermal profile Domina Plus B**

- TC1
- TC2
- TC3
- TC4
- TC5