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MATACHANA GROUP CORPORATE NEWS

No. 03 · 2016

## LOW TEMPERATURE

THE 130HPO IS BORN,  
CUTTING-EDGE TECHNOLOGY  
IN STERILIZATION

## KLINIKUM KASSEL

PLANNING & INSTALLATION  
BY WEBECO

## AFTERMATH OF THE EBOLA CRISIS

LIBERIA HOSPITALS IMPROVING  
THEIR STERILE SUPPLY

INTERVIEW  
**DR. WOOLRIDGE**

CHAIRMAN ISWA WORKING GROUP

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**●●● MATACHANA PROVIDES SERVICES IN OVER 110 COUNTRIES.  
OUR OFFICES ARE IN SPAIN, GERMANY, FRANCE, USA,  
ARGENTINA, MALAYSIA AND CHINA**



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## COVER

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The polar aurora or aurora polaris is an extraordinary phenomenon of colors and luminescence which paints for short periods of time some of the remotest night skies of our planet, usually in polar areas. In the northern hemisphere, it is known as aurora borealis (northern lights) while its counterpart in the southern hemisphere is called aurora australis (southern lights). It occurs when solar radiation (solar wind) hits the Earth's magnetic field, stretching as if it were a rubber band and cumulating within large amounts of electrons that generate the plasma (aurora).

With the spectacular front cover image of this issue, we present the new model 130HPO, which represents a new breakthrough in low temperature sterilization.

## A PROJECT IN CONSTANT DEVELOPMENT

In the previous issue of our magazine we highlighted that since our origins a constant evolution has been maintained that has made us what we are today, a company that is MORE THAN A MANUFACTURER OF MEDICAL DEVICES.

We have not only evolved into the technology itself used in our equipment but we have been able to expand our horizons to new challenges, that we have slowly and steadily been achieving and consolidating as a core part of our DNA.

Becoming providers Global Solutions has just been the beginning of an exciting journey that today is a reality. The complete new range of washers for instruments, that this year will see the light, is an example of this development that complements the new line of equipment and consumables we launched last year.

The clear commitment to low temperature, with the launch of the new HPO device only confirm the commitment that we made some years ago with the low temperature; being historically the only international company that has manufactured, and not only marketed all the different technologies from ETO to peroxide is an indisputable fact.

Internationalization is one of the goals we set as strategic. The creation of our subsidiaries in Miami and Kuala Lumpur are examples of this.

How about the future? We can only hope new expectations and challenges that make us grow while maintaining our family business label, close and modern.

From left to right:

Manuel Matachana, CEO MATACHANA USA Corp.

Arantxa Matachana, Treasurer MATACHANA GROUP

Juan Antonio Matachana, CEO MATACHANA GROUP



# MATACHANA LOW TEMPERATURE STERILIZATION TECHNOLOGIES

THE NEW 130HPO IS BORN



**ARNE HAUSCHILD**  
Industrial Technical Director  
MATACHANA GROUP

Within MATACHANA GROUP, the low temperature sterilization technology has a long time history. Parallel to the development of traditional steam sterilization processes, several low temperature sterilization technologies have been developed and operated. Starting with ethylene oxide and peracetic acid, MATACHANA has later focused on the Low Temperature Steam and Formaldehyde (LTSF) process in which fields we have more than 40 years of experience with LTSF sterilization. Being the leading expert in the LTSF technology is not sufficient for MATACHANA.

Within the scope of a development project, the knowledge about Low Temperature Sterilization has been widened. A new sterilizer system, the 130HPO, working with the Hydrogen Peroxide sterilization process (HPO), has been developed by the MATACHANA team.

Although the Low Temperature Hydrogen Peroxide ( $H_2O_2$ ) sterilization is known in the market, the Hydrogen Peroxide technology generates some controversial discussions between experts in several European countries.

Based on this situation, MATACHANA has introduced an international team, headed by its R&D, I department (Research & Development, Innovation) for the development of the first MATACHANA Hydrogen Peroxide Sterilizer. Within the development process, the close cooperation between the involved departments (R&D I, Quality, Marketing, among others) has led to a new understanding of the hydrogen peroxide technology.

Experts have expressed their concern for a long time about the absence of European or International standards for this technology. In order to overcome this situation, MATACHANA team led a draft standard, which is currently approved by the German DIN standardization committee and accepted as a new work item by the international standardization authorities. Besides, a validation standard is not available for Hydrogen Peroxide sterilization. Therefore, we are also active participants in the French working group that is preparing the  $H_2O_2$  validation standard.

As a result of the enormous effort, the first 130HPO Hydrogen Peroxide sterilizer is a new member of the low temperature sterilizer family within MATACHANA GROUP

The 130HPO with Hydrogen Peroxide sterilization process (with plasma phase) is the brother of the well known 130LF who operates with Low Temperature Steam with Formaldehyde process (LTSF). The sterilizers 130LF and 130HPO are specialized to fulfill the market requirements of low temperature sterilization, each with their specific advantages for distinctive applications. Our experts are eager to consult you in order to evaluate the best solution for your low temperature application.

The 130LF with LTSF process is a well known MATACHANA sterilizer which is operating in more than 60 countries all over the world. As well as this low temperature sterilization application, MATACHANA is investigating to push the safe and well known LTSF technology up to a new level.

The complete new development of the sterilizers 130HPO and 130LF is presented as new low temperature sterilizers with a revolutionary new design.

The focus of the development was given by the customer needs, which are in short words concentrated in:

## OPINION

ELENA LORENZO  
Infection Control Manager  
MATACHANA GROUP



### **Is the coexistence of the hydrogen peroxide sterilization devices and LTSF sterilizers possible?\***

When a hospital is considering the acquisition of a Low Temperature equipment, the first thing to do is an objective assessment of the real need for sterilization of heat sensitive materials, to avoid investment in a device and mainly in consumables with a limited shelf life and resulting underutilized. There are, of course, a number of mandatory criteria that a center must assess given this obstacle, mainly related to patient safety, workers and medical devices themselves: the microbial effectiveness of the technology, the hypothetical presence of residues and compatibility with materials commonly used by manufacturers of medical devices.

LTSF Sterilization covers all these aspects thanks to the existence of specific standards, stating a sound policy that brings safety to the equipment, the process and usage (EN 14180 and ISO 25424). As to H<sub>2</sub>O<sub>2</sub>, even though the German DIN committee and French AFNOR standards are setting up guideline normatives: one constructive and safe and the other one related to validation, the red tape here implies that no specific standard will come to light for the next 3 years. Hence, the support provided by the certification obtained by the 130HPO Matachana device through TÜV Rheinland, ensures that the equipment is and will be subject to these new standards.

Performing a cost analysis per cycle, differences between the two technologies are even more pronounced, due to the price of sterilizing agent and especially the peculiarity of the packaging material required by H<sub>2</sub>O<sub>2</sub> which multiply 3-5 times the cost of conventional packaging.

However, beyond cost, high penetration of steam formaldehyde on multichannel complex medical devices with a length over 80-100 cm and small diameter is only comparable to that of ethylene oxide. In this regard, the H<sub>2</sub>O<sub>2</sub> devices have a clear limitation. Hence the advance of surgical practice and the presence of complex flexible endoscopy in the operating rooms, can put each system in place and induce the need for two different Low Temperature sterilizers working in unison in the CSSD:

- Material with no immediate delivery need or material of very complex design: LTSF sterilization
- High turnover material and high economic value: H<sub>2</sub>O<sub>2</sub> sterilization

Now, Matachana offers customized solutions to serve the hospital's needs; a sign of our globality and spirit of service.

\* Low Temperature Steam Formaldehyde

- Effective and safe low temperature sterilization process
- Cost-effective operation with low level consumptions and short process duration
- Integrated user friendly EasyRUN interface
- Environmental safe handling of the chemical agents

As a solution provider, Matachana offers with the two low temperature sterilization systems the complete know how of the technologies. As well, the company provides the full service and support around the low temperature sterilization, like wrapping materials, process supervision with chemical or biological indicators, up to complete process validation.

The Quality System guarantees that the development and of course the production of the sterilizers comply with the requirements of medical devices, which ensures the specified and reliable quality expected by our customers.

The quality of the systems is supervised by the Notified Body TÜV Rheinland, Germany. Already at an early stage of the development, Matachana has incorporated TÜV Rheinland, in order to ensure safe systems which fulfill the international requirements.

Due to this effort, Matachana GROUP is expert on the most important low temperature sterilization technologies, presenting at the same time two new sterilizers which guarantees a safe and gentle low temperature sterilization of medical devices.





MARINO ALONSO  
Marketing Director  
MATACHANA GROUP

# WHAT DOES THE FUTURE HOLD?

This rather enigmatic title aims to reflect the complex situation that has accompanied Low Temperature Sterilization over all these years. While steam sterilization has remained constant, with slight changes mainly due to attempts to optimize the length of cycle times, improve drying conditions with the challenge of new packaging materials, or maximum automation of systems, the Low Temperature battle has now broken out in what sterilizer to use to offset the lack of efficacy of steam at temperatures lower than 121 °C.

From the processes that used Ethylene Oxide, use of which started in the 1940s, through to present-day sterilization using Hydrogen Peroxide, using either plasma or vaporization, passing through different evolutions of equipment using formaldehyde, history has given us numerous examples of the ebb and flow of trends in this type of sterilization.

MATACHANA GROUP has hardly been immune from this process. Starting with the old Ethylene Oxide devices, either with cartridges (with the use of Freon and its derivatives such as propellants) or industrial bottles (with CO<sub>2</sub>), and then equipment using formalin solutions with concentrations of over 35% through to modern-day ones with concentrations of less than 2%, standardized according to European standards, the process culminated in the landmark of the launch of Hydrogen Peroxide equipment. We can proudly claim to have been the only manufacturer to have gone through all these technological processes, boasting an almost chameleon-like adaptation to meet the requirements and wishes of our clients.

The challenge we now need to tackle is to show our clients that LTSF and Hydrogen Peroxide sterilization equipment is not at all antagonistic, quite the opposite. Both technologies complement each other



perfectly, given that they use different materials to sterilize depending on their characteristics and design. For example, using LTSF for those of greater complexity, where the penetration capacity of this technology has been amply demonstrated and proven, and using H<sub>2</sub>O<sub>2</sub> for high-turnover jobs where a faster cycle is an evident advantage for hospitals.

This is an exciting task and one which we are confident will be undertaken successfully by our entire sales and marketing team, thanks to the team of expert product managers and our Matachana International Education Center (MIEC).

Finally, and returning to the heading of this article – What does the future hold? – the answer, looking at the above explanation, is not a simple one. For some time now, new technologies have been emerging that offer other sterilization alternatives to those methods already known. Are these the answer to our question? Many of them have only been used very occasionally and with little success, but in terms of those that emerge from now on, only time, the new materials and designs of complex instrumentation and the requirements associated with their sterilization will tell.

As far as MATACHANA GROUP is concerned, they represent another step in our natural evolution at the forefront of hospital sterilization and disinfection, but the story does not end here; it has only just begun.

**MAXIME-HENRI LEBON**  
Responsible for AFNOR Group  
for Hydrogen Peroxide



## HYDROGEN PEROXIDE IN FRANCE

In the field of medical device sterilization, France has shown great caution before changing its practices, for historical and cultural reasons. In fact, today, in that country, the main method for sterilization of medical devices is still steam, in accordance with current regulations. However, French pharmaceutical companies are currently considering processes with hydrogen peroxide as an additional alternative, in particular for treating medical devices sensitive to temperature (such as flexible endoscopes, for example). Faced with the coming change, the profession has expressed reservations about the lack of control over the chemical method. It should be noted that, among all the sterilization methods, those which use hydrogen peroxide suffer from a certain opacity, evident in the absence of regulatory texts that regulate and control their practice. In fact, there is no specific standard for validation and routine monitoring (parametric release of the load) and it is difficult to find a consensus on biological indicators (Standard NF EN ISO 11138-6 should have clarified this point, but has not been published to date). These grey areas create mistrust of this technology, which we paradoxically have to turn to in order to treat medical devices that do not support steam. In this situation, users who have raised doubts to experts have brought about the creation of a working group within the S95R committee of the French Association for Standardization (AFNOR). This expert group, involving representatives from the hospital sector (pharmaceutical and biomedical engineering), validation companies and builders (quality control, qualification and re-qualification) has the mission of proposing a document to control the hydrogen peroxide sterilization process. To do this, the document must describe, among other things, operations with which the installation processes (to be re-qualified) and the methods to be used in routine checks (by users) are validated. This project can only be carried out with the active participation of manufacturers – who we are pleased to invite to the working group – and always bearing in mind that its objectives remain the interests and safety of patients.

# LOW TEMPERATURE STERILIZATION SPECIALISTS

INNOVATING  
HEALTHCARE

# NEW GENERATION MAT LD



**WASHING &  
DISINFECTING  
DEVICES**

# THE NEW GENERATION MAT LD:

## EFFICIENCY, EFFICACY, EFFECTIVENESS

ROGER LLINÁS

Product Manager Washing and Disinfection  
MATACHANA GROUP



**T**here are innate values in the MATACHANA DNA, such as service, quality and innovation. And these values are reflected in each and every one of our products. The evolution of the MATACHANA MAT LD washer line is no stranger to these principles and is therefore a true reflection of what we want when we need reliable, efficient, high-performance equipment designed to the highest quality standards.

Defending these values, the new MAT LD500 system, recently presented, has become a true reflection of the vision of MATACHANA for automatic washing and disinfection equipment; both processes vital to the success of the material reprocessing and sterilization cycle.

The MAT LD500 washer, a very small sized unit with a compact mod-

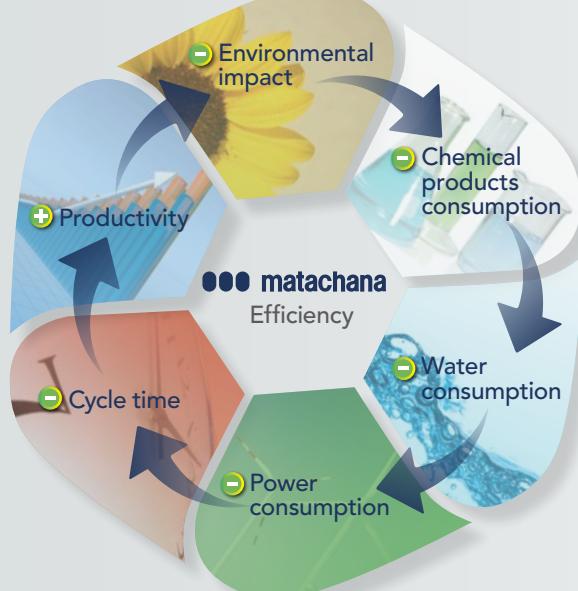
ern design, has surprising washing capacity. As many as 12 DIN 1/1 baskets in the same wash cycle. But that capacity would not be relevant if we did not take into account one of the above principles: efficiency. It is this efficiency that serves as a link for all the elements that make up both the process and the product. Studied and designed to optimize all resources and materials, the MAT LD500 has become the system with the lowest consumption of water per washing cycle on the market, which in turn results in a significant reduction in the cost per washing cycle, requiring fewer chemicals and reducing cycle times without requiring an increase in the energy consumption per cycle. On the contrary, we have reduced the power of the parts to the appropriate and necessary level to ensure the highest quality process with the minimum energy.



MATACHANA EasyRUN Interface

All this is also managed by a powerful new control unit for the MAT LD500 washer, including the latest generation 7 inch touch screen and the simplicity of the MATACHANA EasyRUN control interface: easy, intuitive and complete.

In short, an outstanding system establishing firm foundations for MATACHANA MAT LD washers in the present and the future, and which we invite you to discover.



"MAT LD500: the optional and efficient use of every resource needed for washing results in supreme efficiency"

# NEW LINE OF CONSUMABLES

MONITORING  
MEDICAL DEVICE  
REPROCESSING



**DR. NELSON CARRERAS**  
Product Manager Monitoring Devices, Ph.D.  
MATACHANA GROUP

Monitoring medical device reprocessing in a CSSD (Sterilization Central) enables routine checking of hygiene conditions, the microbiological burden and verification of the physical and chemical parameters in washing, disinfection and sterilization processes. Additionally, monitoring the reprocessing of laboratory products is also increasingly common for good laboratory practice in research centres, as well as in the pharmaceutical and biotechnology industry.

Today, the Association of Advanced Medical Instrumentation (AAMI) enforces the CSSD users to routinely use the Bowie-Dick test, and its different formats, to verify the operation of sterilization equipment. There are few countries in the world where governments require the use of routine tests for monitoring medical device and laboratory reprocessing (Brazil and Macedonia, amongst others). However, even

though there are no binding international standards for other monitoring controls, strict hospital audits and rigorous quality control of biopharmaceuticals require users to have comprehensive traceability regardless of periodic parameter validations.

Monitoring controls allow basic assessment of the reprocessing efficiency by detecting the physicochemical sensitivity and microbiological resistance of a device, making it possible to verify the critical variables in washing, disinfection and sterilization processes.

In the area of sterilization, for the technical assessment of these controls, specialized equipment called resistometers is necessary. The ISO 18472:2006 Standard defines the specifications of this equipment for different sterilization systems. Even though it is true that for sterilization systems such as steam, ethylene

oxide and dry heat, well defined resistometers already exist on the market, in both the emergent and classic low-temperature systems, such as formaldehyde or hydrogen peroxide, their designs are either not standardized such as regards to the formaldehyde, or not well established in the market which is the case of hydrogen peroxide. If we also add that the approval of manufacturing standardization of new controls is at a critical point for incorporating new scientific and technological possibilities, we find ourselves in a moment of crucial development.

In general, advice on the selection, use and interpretation of monitoring devices involve extensive knowledge of reprocessing processes carried out by a CSSD. This extensive knowledge can establish a close relationship with the user, allowing for monitoring of the correct running of the device, and to thus see what the main needs of our customers are.





**MANUEL MATACHANA**  
CEO MATACHANA USA Corp.  
MATACHANA GROUP

# INTERNATIONAL EXPANSION OF MATACHANA GROUP

**S**ince MATACHANA decided to make its first incursion into the south of France, specifically Toulouse, over 30 years ago, expansion beyond our borders has been a constant feature of the more than 50 years since Mr. Antonio Matachana founded the company.

That entrepreneurial spirit, a passion for excellence, a team of dedicated individuals who fought against every setback with a top quality product, managed to overcome all the barriers that existed at that time to exporting a certain type of product – a sterilizer – where it was necessary to comply with national regulations to be able to sell it abroad: the French NF Standard, the German DIN, the

British BS, and so on. This provided an excellent training school in adaptation for our engineers and sales teams. This was followed by the leap to Latin America, where some large-scale operations resulted in the company setting up in Argentina. This was followed by subsidiaries in France and the company's key acquisition of German firm WEBECO, followed by our establishment in Malaysia and, most recently, the creation of the US subsidiary last year.

Today, we are proud to say that we have a stable presence in more than 110 countries on the five continents, exporting our sterilizers, disinfectant washers, integral solutions for CSSD and equipment to the sector known

as Life Science (research centres, biosafety and industry).

Today MATACHANA GROUP is a multinational with a strong family character; a company which thanks to huge investments in product innovation, is equipped to continue expanding its presence in international markets, winning greater prestige and further enhancing the global reputation and recognition of its brand. The company's most prized asset is undoubtedly its team of staff, which it hopes to maintain in future generations, motivating its subsidiaries and distributors to continue tirelessly striving to achieve the satisfaction of our end clients: the professionals who fight to combat cross-infections on a daily basis with our state-of-the-art technologies.



## MATACHANA GROUP Worldwide

BRUNEI RUSSIA ESTONIA THAILAND AZERBAIJAN ETHIOPIA BOLIVIA AUSTRIA USA ITALY ANGOLA GABON SPAIN BOTSWANA TRINIDAD & TOBAGO VIETNAM COLOMBIA BOSNIA CARIBBEAN OMAN PHILIPPINES SRI LANKA RWANDA PAKISTAN GERMANY BURKINA FASO LEBANON CHINA CZECH REPUBLIC CROATIA SLOVAKIA BENIN NICARAGUA LATVIA GHANA INDONESIA MOZAMBIQUE JORDAN HAITI IRAN GREECE IVORY COAST PALESTINE ECUADOR EL SALVADOR CHILE IRAQ SAUDI ARABIA DENMARK PERU HOLLAND COSTA RICA UAE ICELAND PORTUGAL NORWAY INDIA LIBYA BELGIUM QATAR MONGOLIA TUNISIA IRELAND JAPAN MALAYSIA TURKEY MEXICO MOLDOVA TURKMENISTAN HONDURAS DOMINICAN REPUBLIC NEW ZEALAND MALI MACEDONIA MOROCCO ALGERIA SWEDEN SUDAN MADAGASCAR SYRIA SWITZERLAND UZBEKISTAN SURINAME ALBANIA BANGLADESH SERBIA CUBA AUSTRALIA BULGARIA MYANMAR BRAZIL UKRAINE SLOVENIA EGYPT YEMEN SENEGAL PARAGUAY KUWAIT KAZAKHSTAN PANAMA NAMIBIA HUNGARY SOUTH AFRICA NIGERIA UNITED KINGDOM ARGENTINA FINLAND FRANCE EQUATORIAL GUINEA POLAND CONGO REPUBLIC VENEZUELA URUGUAY LITHUANIA KENYA BELARUS GUATEMALA



# MATACHANA ASIA PACIFIC:

THE PILLARS OF A LONG TERM RELATIONSHIP

JORDI POL

Managing Director MATACHANA APAC  
MATACHANA GROUP



Indeed, 2015 has been an important year for MATACHANA GROUP in Asia Pacific. A lot of efforts have been devoted by the entire organization to set-up the pillars of a long term presence in the region by the establishment of a new subsidiary in Malaysia, and hitting the sales target. For all the achievements we would like to thank our friends and partners which have helped us to be successful.

As mentioned before, this is just the beginning of a long journey. MATACHANA GROUP has an

ambitious plan again for 2016 in the APAC region where by 2018 more than 3000 hospitals are expected to be build-up. Today, we are present in more than 15 countries in APAC, from India to China down to New Zealand with very different macroeconomic scenarios; but with an expected growth in healthcare of more than 150%, with a very important contribution from India and China.

Together with our distributors and with the support of our group of experts and colleagues in Barcelona, the team of Matachana Asia Pacific

expects to contribute again to the growth of our holding company, but most important to serve our clients to the highest level. To reach this goal, we have allocated all the resources as our new regional MIEC (Matachana International Education Center) at our new premises in Kuala Lumpur with different trainings in product and project management, as well as different events and tradeshows throughout the region.

I kindly invite you to enjoy together with us the MATACHANA Experience.



# MATACHANA FRANCE NEW CORPORATE PREMISES

**TOMÁS ADOT**  
Managing Director MFSAS  
MATACHANA GROUP



**I**t was prime goal for this beginning of 2016, and we succeeded!

Since last January 4th, we are already installed in the new headquarters of MATACHANA FRANCE in Creteil, Paris.

The new building, is almost three times the area of the former headquarters, offering modern facilities to our entire team. In addition to the new offices and equipment, in the same building we have a large store of spare parts, much wider and adapted to the

machine pool that we have in France.

Also, the new showroom located in the lobby of the building, will allow us to conduct specific trainings for both our technicians or internal staff, as well as for the end users.

The new facilities transmit the new corporate image of MATACHANA GROUP, an image consistent with the high quality of the equipment we offer and the quality of our service and our human resources. In short, it strengthens and consolidates

FRANCE MATACHANA as one of the protagonists within the French territory in the sectors of Healthcare and Life Science. One of the strongest and historical industry leaders.

In addition, during the past year we have expanded our workforce by 25%. Most of the new additions have strengthened even more, our technical team in order to continue to offer the best technical service amongst the sector, an asset which has always distinguished our company.



**BIRGER SPAHRBIER**  
Managing Director of WEBECO GmbH

## "CUSTOMERS LOOKING FOR A COMPLETE SOLUTION FROM ONE SOURCE, AND THIS IS OUR STRENGTH!"

With 32 specialized departments, more than 3.200 employees and nearly 200.000 patients per year, the Klinikum Kassel is the biggest hospital in the region of Hessen/Germany. Considering these figures, it was necessary to greatly enlarge the preparation of surgical tools, with a target to double the sterilization supplies from 110.000 to 220.000 units per year.

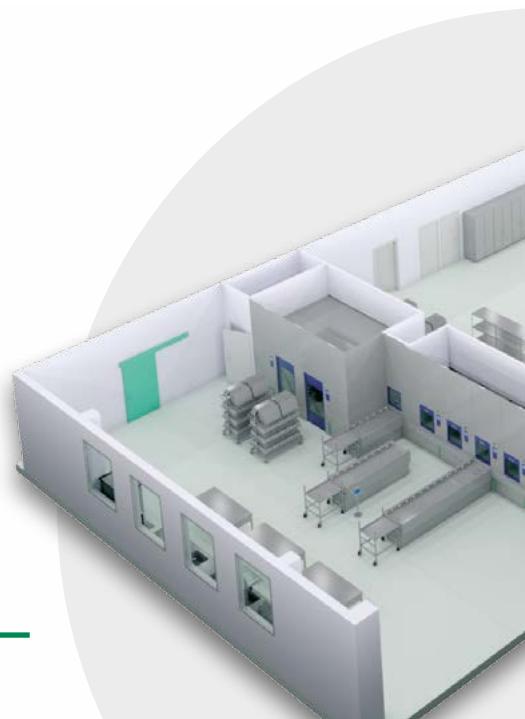
In order to achieve these quantities, the construction of an additional building including a new Sterilization Central was started in November

2012 and was finished in August 2015. The investments amounting to around EUR 5.4 million.

The building was designed, built and technically equipped by VAMED, service-partner of Klinikum Kassel. The new building is now leased to the CASALIS Facility Services GmbH, which is a service company consisting of 51 % of the Klinikum Kassel and 49% of VAMED. For the future, it is planned to offer the sterile services by CASALIS for hospitals of Gesundheit Nordhessen Holding (GNH) and other hospitals in the region.

The requirements were complex and all the processes had to be planned in a most customized way. Starting with the MATACHANA GROUP own special calculation software EasyPLAN, which calculates the right combination between capacity and equipment, WEBECO was able to calculate the optimal solution for the customer needs.

The discontinuous delivery of large quantities of sterile materials requires



a quick and focused execution. In order to ensure this and an optimized workflow, a high degree of automation is required. For this, WEBECO has installed dual-chamber machines with automatic loading system.

Another special equipment that reduces the workflow in the washing area, are the specific loading racks. This is a huge advantage over the conventional MIS (Micro Surgery Instruments) - loading baskets. The freely selectable combination of MIS modules gives a flexible and effective use of loading baskets, which saves time and reduces the number of load baskets.

For the delicate eye instruments that have very narrow lumens and thus require a very careful handling which obviously should not be prepared with other instruments, a separate machine was installed.

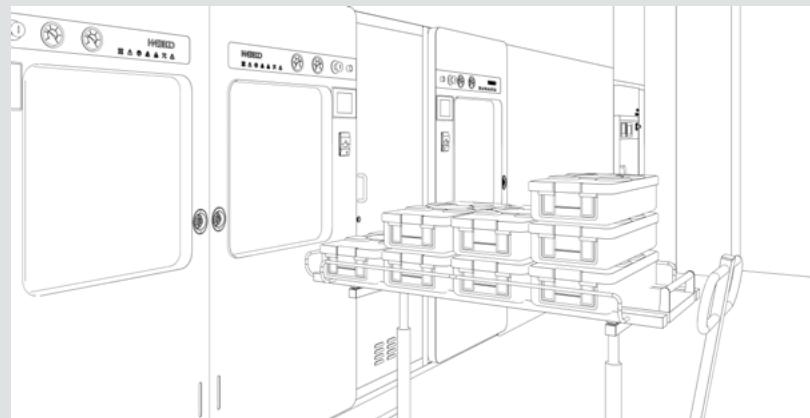
In the area of sterilization four WEBECO EC 280 sterilizers have been installed. The selected sterilizers have clear benefits for the employees, they are now working in an ergonomically correct height, thanks to the height-adjustable trolley, with health benefits and particularities that this represents.

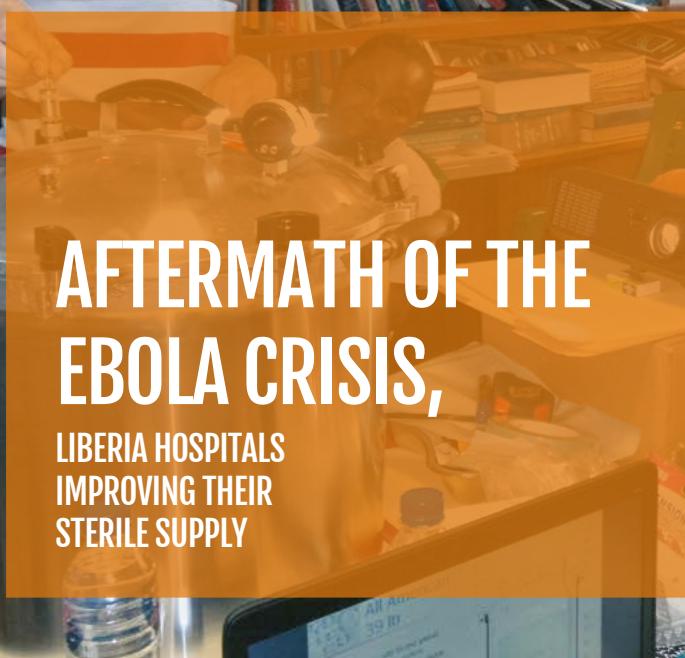
At the end, we have a highly satisfied customer and a very good reference installation for the german subsidiary of MATACHANA GROUP – mission accomplished!



## FROM PROJECT TO REALITY ...

MATACHANA GROUP Competence Center is responsible for designing the best proposal for equipment installation, adapted to the specific needs of each center, constantly having in mind to optimize the results.





# AFTERMATH OF THE EBOLA CRISIS,

**LIBERIA HOSPITALS  
IMPROVING THEIR  
STERILE SUPPLY**

**JAN HUIJS**  
Ing. Jan Huijs, Trainer/Technician  
in sterile supply

**Y**ear 2014, Liberia, West Africa. The country is confronted with the most deadly disease in recent history: Ebola. The German Red Cross assists the national John F Kennedy Medical Centre in Monrovia with the establishment of a triage unit, where all incoming patients are tested on signs of Ebola. The representing officer of the Red Cross is invited to visit the neighboring Japanese-Liberian Friendship Maternity Hospital, attached to the Medical Center. The Maternity Hospital has been established in 1983 with the support of the Japanese International Cooperation Agency JICA, and in 2010, through a donation of JICA, the hospital was reequipped.

Installation of the equipment was executed through UNOPS, the United Nations Office for Project Services. The equipment that was

supplied included a large new S1000 MATACHANA autoclave. Installation was done and acceptance tests were started but problems developed with the compressor that is required for operating the machine; at the same time the technician installing the equipment fell sick and was repatriated. Since then the autoclave had been standing idle; sterilization for the maternity had to be done in a small basic manual sterilizer in the main hospital. The new machine had never been in production. The Red Cross offered support to get the autoclave running again and contacted the Dutch sterilizer technician Jan Huijs to get the job done.

An assessment visit took place by October 2014 which confirmed that commissioning the machine was feasible. MATACHANA was contacted and Jan was offered a training in

Barcelona factory on the technical details of the S1000; also training on the newer SC500 was done, as he was to also install and commission a new autoclave of this type in the neighboring St. Josephs Catholic Hospital. The necessary equipment was ordered and in May-June the hospitals were visited again to do the actual installation work in close collaboration with the hospital technical team.

A major issue was the quality of the water. The inside of the steam generator and water piping was covered with a layer of clay-like particles. Water hardness was sufficiently low; so installing a water filter system was sufficient for protecting the autoclave sediments and dirt. The compressor for the pneumatic valves and door-opening system was replaced. Electricity supply can be very unreliable with long and short black outs



and brown outs. For this a UPS was installed and thus protects the electronic control system and prevents failed cycles in case of short power cuts. With the great support of the MATACHANA GROUP technical team in Barcelona all technical issues could be resolved and soon we could run a first Bowie-Dick test cycle.

Finally all acceptance tests were passed. Training for users and technicians were presented and after 4 years after its installation, the machine could be handed over for its first production cycles! With Liberia recently being declared Ebola free, more and more patients are coming to the hospitals again.

The CSSD of the Maternity of JFK Medical Centre is thus getting ready to contribute to the new challenges ahead in providing the required health service needed for the people of Liberia, that now slowly but surely are recovering from the time that Ebola crippled country...



**"MATACHANA GROUP SPONSORS THE NEW EDITION AND COLLABORATES WITH THE SPANISH TRANSLATION OF THE MOST COMPREHENSIVE STERILIZATION BOOK WORLDWIDE"**





**TIM O'NEILL**  
Business Development Manager  
IN VITRO TECHNOLOGIES

## CSSD IN BRISBANE, AUSTRALIA

MATACHANA GROUP has partnered with In Vitro Technologies Australia, to provide a more efficient sterilizing solution for the Sterilizing department of the Wesley Hospital located in Brisbane Australia. With the recent addition of two major operating theatres taking the number of operating theatres to 22 in total, the demand for sterile goods had increased beyond the current capacity. The Central Sterilization Services Department had limited space to work with, previously utilizing three steam sterilizers. A new layout and floor plan was required to fulfil current and future demand, utilising the limited amount of floor space available. The compact footprint of the MATACHANA sterilizers was ideal in this situation.

The new layout allowed for five S1000 Series sterilizers to be installed with space for a sixth unit and automation as part of the second stage. Capacity and productivity throughput for the department has been greatly improved. Three of the five sterilizers are pass-through models and two are positioned as single door because of space restrictions. In having the extra available capacity, the CSSD can split priority items from normal loads allowing faster turnaround times to service the busy operating theatres. The case mix includes Cardiac, Orthopaedic, Neurology and General surgery.

With planning and Technical assistance from MATACHANA and In Vitro Technologies, the sterilizers were installed smoothly and without closing down the department during installation which was a benefit to the busy hospital.



Loading zone, sterilization area,  
Wesley Hospital in Brisbane



Unloading zone, sterilization area,  
Wesley Hospital in Brisbane





ooo matachana

SAT  
SERVICE  
& SUPPORT

## NEW BUILDING FOR THE TAS OF MATACHANA GROUP

MATACHANA GROUP inaugurated last September a new building for the exclusive use of the Technical Assistance Service, located next to the Castelldefels Production Center. These facilities are equipped with all the necessary infrastructure to enable our staff to provide a service to live up to the expectations and needs of our customers.



# RBE MATACHANA STERILIZERS:

THE ULTIMATE STERILIZATION, EVEN FOR  
INFECTIOUS WASTE

EULÀLIA MARTORELL  
International Coordinator  
MATACHANA GROUP



**I**t is well known that controlling infections is a matter of the utmost priority for every single health centre: CSSD, surgical areas and isolation wards, amongst others, must remain aseptic and prevent the propagation of infections to patients. To do so, we use high-tech equipment that complies with the international standards that apply to their use.

At the same time, these areas generate all kinds of waste and though in many cases this is not dissimilar to urban waste, there is a certain percentage that is very infectious indeed and must be treated completely differently by techniques that allow it to be transformed into urban waste.

Steam sterilization is currently the most widely-used technology for this purpose, being safe, verified, sustainable and affordable.

The dilemma that health centres and waste management bodies face lies in understanding the importance of offering the utmost quality and safety even when it comes to the destruction of waste. At the end of the day, the primary objective is the same as that of the CSSD centre in the surgical department: to minimize the risks to patients and health centre personnel and the surrounding population.

For this reason, MATACHANA applies the same standards of quality and safety to the infectious

waste sterilizers as it does to the surgical departments sterilizers: total process control by microprocessor and dual CPU, fractionated vacuums for the correct elimination of air from the chamber, steam penetration and final drying, and validation of cycles to guarantee sterilization and environmental sustainability with energy and water saving systems. This whole process allows us to guarantee the proper elimination of infectious waste without damaging the environment and without putting people at risk.

When it comes to treating biohazardous waste, as far as MATACHANA GROUP is concerned, WASTE is synonymous with QUALITY and TECHNOLOGY.

**matachana** | +50 YEARS | Experience that improves lives



## Integral Solutions Infectious Waste Treatment



( sterilizer + shredder + compactor) = environmental friendly

### Steam sterilizers

- Medium capacity
- Large capacity
- Steam generators

### Post treatment

- Shredders
- Compactors
- Monitoring systems

**IWIS** | ANYWHERE  
ANYTIME  
Infectious Waste Integral System

A mobile and complete solution for the infectious waste treatment

## INTERVIEW

**DR. ANNE C. WOOLRIDGE**

Chairman of ISWA working group



Anne is the Technical Director of Independent Safety Services Limited and is well-known in the field of healthcare waste management, nationally and internationally. She works closely with a number of organisations in order to improve the management of healthcare waste from both the NHS and private sector. She is currently the Chairman of the Healthcare Waste Working Group at ISWA (International Solid Waste Association) in which MATACHANA takes part actively as a Golden member.

**What are the main objectives of ISWA and specifically of the Healthcare Waste Working Group (HWWG)?**

The main objectives of the group are to promote best practice in the field of healthcare waste management, the actual detail of which will depend on the country where the advice is needed. There are significant differences between developed and developing economies.

We have a formal relationship with the World Health Organisation, which comes to us for advice, the most recent areas we have worked with WHO has been on managing ebola contaminated wastes from West Africa and the destruction of the tri valent oral polio vaccine.

**What are the main activities developed by the HCWWG and what are the targets for next years?**

In recent years the working group has written two documents, one on "Guidelines for preparing tenders for the provision of healthcare waste infrastructure". The second was to give guidance on Training Strategies for Healthcare Waste Management. The targets for future years are to support the main projects proposed by the ISWA Scientific and Technical Committee. There are major challenges in the waste management sector and while some healthcare wastes need specialist management, we must be aware of the wider context too, such as the Circular Economy and options for becoming more resource efficient within the sector.

**From the Stockholm Convention, parties are required to take measures to eliminate or minimize the production, use and release of persistent organic pollutant (POP's). Are these measures affecting the daily practices and treatment technologies used so far with healthcare waste?**

In my opinion, not so much in countries where incineration of healthcare waste is a legal and permitted option, this is because the regulation in these countries limits the amount of POPs that are released to the atmosphere. The majority of the investment in a new incinerator is in the gas cleansing technologies. Where healthcare wastes are incinerated without these strict legislative controls then the production of dioxins and furans can be a significant issue

and alternatives should be sought, this may be in the form of autoclave or other non burn technology.

**How can manufacturers of waste treatment technologies such as MATACHANA contribute to establish sustainable waste management practices and definitely to make a better world?**

It is important that manufacturers make technologies that are suited to a range of markets. In developed nations the legislation may require an "all singing all dancing" highly technological solution where water and power are available, even if they are expensive resources. As a sector, we need to recognise that some nations do not have a guaranteed supply of these, so we need to look for solutions that may use less of these precious resources. Also supplying machines that are easy to maintain and repair means that even in challenging circumstances healthcare waste can be made safe to protect those coming into contact from injury or illness. By making machines that are in a range of sizes, a suitable solution may be found to meet the needs of the waste producers. The main aim of what we do is to keep people safe. From a healthcare waste perspective this means ensuring that any waste that has the potential to cause harm needs to be made safe. We will not be able to prevent all healthcare waste from being landfilled, but what we can aim to do is ensure that any that is, has been made as innocuous as possible.



MEDICA 2015, Düsseldorf

## THE BEST OF OURSELVES

In 2015 MATACHANA GROUP participated in more than thirty fairs and congresses at international level. These venues have shown the latest developments and solutions that the company offers.



### WFHSS 2015, LILLE

MATACHANA GROUP participated as a Gold Sponsor in the world WFHSS congress, held in Lille from 7 to 10 October 2015, featuring the latest products novelties and integral solutions in Infection Control.



### MEDICA 2015, DÜSSELDORF

From 16 to 19 November 2015 MEDICA took place in Düsseldorf (Germany). It represents one of the most important engagement in the medical sector, which MATACHANA GROUP could not miss.



### ARAB HEALTH 2016, DUBAI

Arab Health is the largest event in the Middle East medical technology. During the 25 and 28 January 2016 MATACHANA exhibited in the stand the latest trends in integral solutions for its different product lines.

## NEXT EVENTS ...

**COMTECH** (Paris, France) | **EXPODENTAL** (Madrid, Spain) | **SOCINORTE** (Bilbao, Spain) | **CEFH** (Lille, France) | **MSSA** (Kuala Lumpur, Malaysia) | **CMEF** (Shanghai, China) | **MAESTROS INDUSTRIALES** (Jaén, Spain) | **HOSPITALAR** (Sao Paulo, Brazil) | **AFRICA HEALTH** (Midrand-Johannesburg, South Africa) | **FELASA** (Brussels, Belgium) | **PANAMERICANO** (Montevideo, Uruguay) | **AFSTAL** (Nantes, France) | **INGENIERÍA HOSPITALARIA** (Alicante, Spain) | **HOSPEX** (Indonesia) | **WFHSS** (Brisbane, Australia) | **HOSPEX** (Japan) | **AALAS** (Charlotte-South Carolina, USA) | **MEDICA** (Düsseldorf, Germany) | **CSSD** Conference (Thailand) | **CSSD** Conference (Philippines).

# MIEC, MATACHANA INTERNATIONAL EDUCATION CENTER

DECades OFFERING QUALITY AND EXCELLENCE IN PROFESSIONAL TRAINING ON FIVE CONTINENTS



Training conducted in the new facilities of MATACHANA GROUP in Barcelona



Delivery of certificates in CEDIMAT, Dominican Republic



Project Experience seminars, Madrid

## "MIEC PROVIDES BOTH THEORETICAL AND PRACTICAL TRAINING ACTIVITIES ALL OVER THE WORLD"

Hospital staff and our own distributors are suitably trained, in both the use of processes and equipment in order to facilitate their daily work, and to make the most productive use of their facilities and future projects. Every time we sell and install MATACHANA equipment, we obviously make a material benefit. However, at the same time we are supplying something intangible which is difficult to appreciate at first sight, but which provides tremendous professional and personal satisfaction: we deliver knowledge and improved healthcare, very often in greatly disadvantaged communities with tremendous basic needs. In short, WE GIVE LIFE!

**Elena Lorenzo**  
Responsible for MIEC

### SAMPLE OF SOME TRAININGS CONDUCTED LATELY

**16/9/2015.** Hospital de Manacor, Mallorca. Progress in reprocessing complex surgical instruments

**2/10/2015.** Jornada de esterilización en la Escuela de Enfermería de Cataluña. TASS and its association with failures in the reprocessing of surgical equipment

**9/10/2015.** WFHSS Lille. EasyENDOVALVE, beyond the sterilization of flexible endoscopes

**14/10/2015.** Complejo hospitalario Materno Infantil de Gran Canaria. Cleaning and disinfection of surgical instruments

**15/10/2015.** Clínica San Roque de Gran Canaria. Review sterilization concepts

**1/11/2015 – 8/11/2015.** Training seminars in Peru: Hospital Almenara, Centro de Enfermedades Neoplásicas de Lima. Sociedad de enfermeras de esterilización de Perú (SOCIENE)

**13-14/11/2015.** Asociación Española de Enfermeras de endoscopia digestiva. Quality control of reprocessors in accordance with EN ISO 15883-4

**23-24/11/2015.** Fundación Onkologikoa San Sebastian

**25-26/11/2015:** Policlínica Guipúzcoa

**30/11/2015.** Hospital Virgen de la Concha de Zamora

**1/12/2015.** Clínica la Milagrosa en Madrid (endoscopia)

**10/12/2015.** Jornada de la ACICI (Associació Catalana d'infermeres de control d'infeccions)

**14/12/2015.** Complejo hospitales de Navarra, Pamplona.

**25-4/2/2016.** CEDIMAT, Diagnostic Center, Advanced Medicine and Telemedicine of Dominican Republic

# NEW 130HPO

## INNOVATING HEALTHCARE



INNOVATION  
FLEXIBILITY  
CONVENIENCE  
EFFICIENCY  
TECHNOLOGY  
CONNECTIVITY  
SAFETY  
SUSTAINABILITY



- **User friendly:** MATACHANA EasyRUN interface
- **Flexibility:** cycles adapted to the user's needs
- **Efficiency:** cycle profile designed to minimize moisture in chamber, achieving cost savings and increased daily productivity
- **Highly performant** in time penetration in cannulated material
- **Sole manufacturer** that certifies the use of a PCD (Process Challenge Device) as a routine control
- **BluKat sterilizing solution patented by MATACHANA**, with roll-over protection, traceability and batch control via RFID, refrigerated system for product upkeeping once introduced into the sterilizer's compartment
- **Advanced functions:** connectivity, ergonomic load system and single cycle counting related to a flexible endoscope
- **Device concept and process environmentally sustainable**
- **MATACHANA own range of monitoring devices**
- **Easy and quick installation** (plug & play)