CATALOGUE OF PRODUCTS

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INTRODUCTION

With this edition, we are presenting you a non-exhaustive preview of the different ranges and products we can offer and we would like to thank you for the interest you have in Balteau NDT as a company and for its products.

As an NDT manufacturer, Balteau is covering most industries by having portable units, stationary & mobile equipment, real time systems (standard and customised), NDT software, digital imaging, etc. Balteau is one of the most experienced and complete x-ray generators manufacturer and we pride ourselves for delivering high quality and highly reliable x-ray equipment for all type of industries since 1932.

For the first time we are introducing into our catalogue our products for digital applications. Understanding new requirements is very important to us as we are always looking to answer your needs with the best possible solutions. To ensure your satisfaction, Balteau has evolved into more digital applications, and developed products such as software suite, calibration tools, etc.

After sales service is one of the most important aspect for the end user and this is why we worked very hard to offer one of the best service possible. Thanks to our large and worldwide network in more than 40 countries, we are able to be responsive and offer a fast delivery for your equipment and allow every users to have fast maintenance and / or repairs in case the equipment needs it.

Highly qualified engineers, a customer orientated staff and an extensive network is one of the main reason to the success of our brand and to your possibility of always getting, from the selection of your equipment to the follow up in service and maintenance, a qualified and professional support.

Balteau NDT team.
Baltospot stands for Portable equipment used in various fields of activity where portability is the key. Used on any kind of mobile inspections, the Baltospot series provides the user with a versatile equipment, directional or panoramic, constant potential or pulsed wave from 5 to 300kV with power up to 1500 W all air cooled.

Baltospot equipment can be used for field inspections such as Shipyard building sites, foundries, power plants, tank reservoirs, pressure vessels, digital applications, aeronautics and much more. They can also be used in other various environment like laboratories, training centers, museums, etc.

Thanks to their lightweight and 100% duty cycle, they can be operated by one person only and increase productivity. As we like to think further in terms of technology or application, our portable equipment can also be used for laboratory inspections or within our shielded cabinet.

Made of 3 different Series such as, LLX (Constant potential), CERAM (Ceramic tubehead, pulsed wave) and GF (Glass tubehead, pulsed wave), the three series have different specificities and are corresponding to different applications, field of activities or budgets. Different control units are available including Balteau’s wireless remote control, the Hand-X.
**LLX SERIES**

The LLX series is an air cooled, high frequency constant potential generator. It is dedicated to high technology applications like aerospace where specific requirements and speed of inspection are needed. These units are CP type and are controlled by a DC1 or Hand-XD and can be used in combination with digital detectors.

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage Range</th>
<th>Current Range</th>
<th>Beam Angle</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLX110-DA</td>
<td>5 to 110 kV</td>
<td>0.5 to 12 mA</td>
<td>360° x 40°</td>
<td>16 kg</td>
</tr>
<tr>
<td>LLX160-DA</td>
<td>5 to 160 kV</td>
<td>0.5 to 12 mA</td>
<td>40° x 40°</td>
<td>16 kg</td>
</tr>
<tr>
<td>LLX200-DA</td>
<td>5 to 200 kV</td>
<td>0.5 to 12 mA</td>
<td>40° x 40°</td>
<td>16 kg</td>
</tr>
<tr>
<td>LLX220-PA</td>
<td>5 to 200 kV</td>
<td>0.5 to 12 mA</td>
<td>40° x 40°</td>
<td>16 kg</td>
</tr>
</tbody>
</table>

**CERAM SERIES**

The series is made of 2 different versions based on a ceramic insert with a 100% duty cycle. The generators are specifically designed to be operated in difficult environments with a constant output. Both units have to be combined to one of the two available control units, CF2000 or Hand-X, equipped with very lightweight new generation of cables.

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage Range</th>
<th>Current Range</th>
<th>Beam Angle</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERAM235</td>
<td>70 to 235 kV</td>
<td>0.1 to 5 mA</td>
<td>360° x 40°</td>
<td>13 kg</td>
</tr>
<tr>
<td>CERAM35</td>
<td>100 to 300 kV</td>
<td>0.5 to 5 mA</td>
<td>40° x 40°</td>
<td>13 kg</td>
</tr>
</tbody>
</table>

**GF SERIES**

The GF series deviates from the Crawler technology and is providing a reliable and cost effective solution for price sensitive markets. These units have to be combined to one of the two available type of control units, CF2000 or Hand-X with very lightweight new generation of cables.

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage Range</th>
<th>Current Range</th>
<th>Beam Angle</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF165</td>
<td>50 to 160 kV</td>
<td>1 to 5 mA</td>
<td>360° x 40°</td>
<td>13 kg</td>
</tr>
<tr>
<td>GF165</td>
<td>50 to 160 kV</td>
<td>1 to 5 mA</td>
<td>360° x 40°</td>
<td>13 kg</td>
</tr>
<tr>
<td>GF205</td>
<td>70 to 200 kV</td>
<td>1.5 to 5 mA</td>
<td>360° x 40°</td>
<td>13 kg</td>
</tr>
<tr>
<td>GF305</td>
<td>140 to 300 kV</td>
<td>1 to 5 mA</td>
<td>360° x 40°</td>
<td>13 kg</td>
</tr>
</tbody>
</table>

**CONTROL UNITS**

Exposure parameters are sometimes very different from one application to another. With our control units, all these values are accessible by well identified keys and can be stored in built in non volatile memories for further retrieval and use. These units are specifically designed for field operations because of their large handles, metallic covers and shock proof design.

<table>
<thead>
<tr>
<th>Control Unit</th>
<th>Main Supply AC</th>
<th>Frequency</th>
<th>Duty Cycle</th>
<th>mA Max</th>
<th>mA Min</th>
<th>Display</th>
<th>Battery</th>
<th>Weight</th>
<th>Generations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF2000</td>
<td>170 to 260 V</td>
<td>45 to 66 Hz</td>
<td>100%</td>
<td>1 kV</td>
<td>0.1 mA</td>
<td>4 line, green back</td>
<td>8 hours</td>
<td>15 kg</td>
<td>Ceram &amp; GF series</td>
</tr>
<tr>
<td>HAND-X</td>
<td>170 to 260 V</td>
<td>45 to 66 Hz</td>
<td>100%</td>
<td>1 kV</td>
<td>0.1 mA</td>
<td>4 line, green back</td>
<td>8 hours</td>
<td>15 kg</td>
<td>Ceram &amp; GF series</td>
</tr>
<tr>
<td>DC1</td>
<td>170 to 260 V</td>
<td>45 to 66 Hz</td>
<td>100%</td>
<td>1 kV</td>
<td>0.1 mA</td>
<td>4 line, green back</td>
<td>8 hours</td>
<td>15 kg</td>
<td>LLL series</td>
</tr>
<tr>
<td>HAND-XD</td>
<td>170 to 260 V</td>
<td>45 to 66 Hz</td>
<td>100%</td>
<td>1 kV</td>
<td>0.1 mA</td>
<td>4 line, green back</td>
<td>8 hours</td>
<td>15 kg</td>
<td>LLL series</td>
</tr>
</tbody>
</table>

**Most Common Applications**

- Aeronautics, composites & plastics
- Building sites
- Digital applications (flat panels, CR or line detectors)
- X-ray cabinets
- Art, museum (LLX110)

All specifications are non contractual and are subject to change without prior notice.
Crawlers are generators used in crawlers applications that are mostly pipeline and pipe inspections using batteries as a main power supply. Very often mounted on mechanical carriages, Baltospot Crawlers are largely known for their flexibility, high compatibility and robustness in cold or very warm countries where operations are taking place.

Balteau NDT offers a complete assembly including the mechanical carrier, the well-known Balteau NDT X-ray generator, the chopper and a range of accessories in order to make the most out of this equipment and ease the job as much as possible.

When buying an equipment from Balteau, you are sure of receiving the best quality to price value. Thanks to our 100 years of continuous business under the same name as an independent X-ray manufacturer, you stay assured that you'll get a continuous support all through the very long lifetime of the equipment you purchase.
As a major supplier in the crawlers industry, Balteau has designed generators that are specifically designed to be used for pipeline inspection and on mechanical carriers. The Balteau NDT range of generators for crawlers includes the following products: GFC160C, GFC200C, GFC300C, GCP180C & GCP200C. These generators are amongst the most robust and reliable units on the market. With a very light weight and high performances in terms of steel penetration, this equipment is clearly a reference when you are looking for an efficient, cost saving, easy and profitable pipelines inspection.

**THE PANORAMIC X-RAY GENERATOR**

- **Highly compatible, our generators can be adapted to any mechanical carriage of the main manufacturers**

As a major supplier in the crawlers industry, Balteau has designed generators that are specifically designed to be used for pipeline inspection and on mechanical carriers. The Balteau NDT range of generators for crawlers includes the following product: GFC160C, GFC200C, GFC300C, GCP180C & GCP200C. These generators are amongst the most robust and reliable units on the market. With a very light weight and high performances in terms of steel penetration, this equipment is clearly a reference when you are looking for an efficient, cost saving, easy and profitable pipelines inspection.

**THE CHOPPER**

- **As our generators, Balteau's chopper can be adapted to any mechanical carriage of the main manufacturers**

Entirely renewed in 2014, our new chopper has already become a extremely reliable equipment and contains all features that the previous version was already offering and more. Being the power converter between the batteries and the generator, the CFS is an intelligent regulator which will offer the most stable and constant output all along exposures. The CFS is also the one allowing you to set all the parameters for your X-ray exposure and retrieve memory of all generators used before. The CFS also holds memory on the preheating time by retrieving the data stored in the CF3.

**THE MECHANICAL CARRIER**

- **Particularly robust in order to face harsh environment and intensive use**

Depending on your needs different type of carrier can be choosen. This motorized battery powered vehicle is an essential part of the equipment. This is the reason why, this has to be particularly robust in order to face harsh environment and intensive use. They can also be preprogrammed to react to various orders given from the outside of the pipe by either a Radioactive source or a non Isotope system. More than being active on the crawler market for many years, Balteau NDT has become an essential and reliable player, with carriers to be used for all size of pipes (6''-16'' / 10''-60'' / 24''-72'').

**THE BATTERIES**

- **At least one full shift can be covered by only one battery pack**

A specific process has been developed on the CF3 to improve the operating possibilities of the battery pack, so much more exposure can be taken before the battery is discharged. This also improves the battery lifetime by a better management of discharge cycles. A 220 V optional power box allows you to use your x-ray generator on mains or with a power generator without the batteries of its mechanical carrier or for the preheating of the generator (tube).
Baltograph range is a mobile and stationary set of equipment. These equipments are to be used in high demanding applications or in places where production cycles are requiring high power or water/oil cooled tubes.

The entire range has been designed to answer the industry new requirements, excels in production line operations and also has extremely high performances when it comes to digital applications. Baltograph equipment are used in various NDT applications and inspections such as energy, aeronautics, transport, military, bio-medical, and much more.

The difference between the Baltograph series and a portable equipment is that different combinations of tubes are available with the same generator and that no compromise has been made with the power and weight.

When you buy an equipment from Balteau, you are certain of getting the best quality to price value and thanks to our 100 years of continuous business under the same name as an independent X-ray manufacturer, you rest assured that you’ll get a continuous support all through the very long lifetime of the equipment you bought.
**XSD SERIES**

A full X-ray equipment is made up of a generator (XSD), a control unit (LS1), a tubehead (TSD or TSC) and a cooling unit (WCU or OACU). Balteau XSD generators are 19” racks, built around a sealed, oil and gas free, solid stage voltage multiplier. XMD (surface mount devices) electronic is used to reduce maintenance time, size and weight. XSD are either monopolar or bipolar: generators are 100, 160, 225, 320, 420 and 450 kV. Powers available are 4 to 4.5 kW.

**MOST COMMON APPLICATIONS**
- Oil & Gas
- Energy
- Aeronautical/ aerospace
- Transport
- Military
- Bio-medical & agriculture

**COOLING UNITS**

To ensure the best cooling possible and the most reliable equipment with always 100% duty cycle (24h/day). Water cooling units are used for our monopolar tubeheads up to 3000W or 4000W and oil cooling unit for bipolar tubeheads up to 4500W.

**XMD SERIES**

XMD is the mobile version of the XSD. A robust trolley has been specially designed to bring your powerful XSD to the very location of your inspections. Equipped with 2 wheels, well balanced to be easily handled by its hooks if necessary, the trolley is taking all accessories including the 3 or 4 kW closed circuit water cooling unit. No matter if you have narrow doors to pass, the width necessary, the trolley is taking all accessories including the 3 or 4 kW closed circuit water cooling unit. Equipped with 2 wheels, well balanced to be easily handled by its hooks if necessary, the trolley is taking all accessories including the 3 or 4 kW closed circuit water cooling unit. XMD is designed to bring your powerful XSD to the very location of your inspections. Both LS1 and its rack version, the LS1C2. Providing all controls and comfort options to help the user and the production in getting the best of the inspection. Both LS1 and its rack version, the LS1C2. Providing all controls and comfort options to help the user and the production in getting the best of the inspection. Both LS1 and its rack version, the LS1C2. Providing all controls and comfort options to help the user and the production in getting the best of the inspection.

**CONTROL UNITS**

The Balteau series have 2 available control units, our well known and classic LS1 and its rack version, the LS1C2. Providing all controls and comfort options to help the user and the production in getting the best of the inspection. Both of these units software have been entirely renewed to ensure your daily jobs stay easy. All characteristics from the previous version are still available but also more...

**3 DIFFERENT AVAILABLE SETS, SAFETY, PREMIUM AND STANDARD.**

(Feel free to contact us for more details on our sets and / or our products at sales@balteau-ndt.com)
When HV increases, the dielectric strength of even advanced materials is very often not sufficient to provide a good electrical insulation. This is the basic reason for building Rapidia tubes when more than 250 kV is expected. These tubes are ready recognisable by the fact that two HV ends are present with a specific Anode and Cathode identification. Due to the high difference of potential, the cooling media is always dielectric oil.

**All specifications are non contractual and are subject to change without prior notice.**
Baltomatic is incorporating all elements used with Automatic inspection systems. Equipment proposed in this series are designed to fit in automatic or semi automatic systems aiming to provide inspection solutions to various type of demands and fields of operations.

Equipment proposed are elements that can be used alone or in combination to perform inspection tasks according to specific requirements. Standard or customized, elements can be shielded cabinets, manipulators, flat panels, etc.

The Baltomatic series is showing you a basic overview of what has been produced by Balteau in the recent years and all systems presented in this catalogue can be adapted or modified to fit exactly into your own requirements.
**AIS229** - **CONTROL DESK (CTL)**

When you don’t have the proper irradiation room, Baltec can design it for you. Made of Steel-Lead sandwich-plates, our cabins can be equipped with hinged or sliding doors, with or without shielded window. Thanks to their robust and rigid constructions our cabins can also be moved from location with the appropriate lift trucks. Shielding is calculated by Baltec following international standards and all cabins can be delivered with a Shielding Certificate issued by a third party. Cabins are equipped with electrical connections, switches and lighting. Sometimes, a separate section can also host the generator and cooling device.

**DETECTOR (DTR)**

We provide x-ray sources from 100 to 450 kV with different characteristics. Once Energy and power have been defined according to the application, any corresponding Baltec unit can be selected or proposed to be integrated into a system. Mostly common integrations are Baltograph series with a monopolar or bipolar tubehead depending on the selected equipment. When budget are limited and applications are allowing it, we can also propose Balteset units (portable equipment) to be integrated to the system.

**MANIPULATOR (MNP)**

Any type of detector can be placed into a system when it has been properly designed. Films, LDA (linear detector arrays), Flat Panels or Image intensifiers, Baltec can propose the integration of various solutions according to the specification or application. The selection of components integrated can either be the selection of the customer or a documented proposal when the customer wants a specific resolution or result. The main criteria after Performance will be price and therefore our specialists can certainly help you in that field to assist you in the proper selection.

**INSPECTION SUITE**

When radiography becomes digital, your system will need an Image Processing Software but not only; this is the reason Baltec’s engineers developed a complete suite of software, able to control every parts of your installation that have been baptised “The Inspection Suite”.

Part of the Baltoscope family and a direct successor of our well known IPS011, the Inspection Suite is made of different software modules, including our brand new IPS012. Discover all the possibilities the Baltoscope Inspection Suite can offer to your everyday jobs.

**APPLICATIONS**

A few example of Baltec’s most popular systems with a brief description. If you want more details, do not hesitate to contact us via sales@balteau-ndt.com

**AIS228** - **Small to middle size components**

AIS228 - Small to middle size components

- Very compact equipment that has been designed to inspect a wide variety of samples with different thicknesses. This shielded cabinets includes a directional x-ray generator from Balteset range. The cabinets are made of a steel structure with lead reinforcement «sandwich» type assembly (steel-steel-steel). Can be equipped with a rotating plate (optional).

**AIS201** - **Inspection of welded cylinders**

- Real Time system especially designed for the control of welded cylinders. This cost effective inspection system will drastically cut down the inspection time and cost, thanks to its motorized (automatic optional) handling 5 axis manipulator. Equipped with the KSD100 specially suited to the RTP inspection, thanks to its high dose stability.

**AIS958** - **Small to middle size components**

- Very compact complete digital X-ray system allowing the inspection of a wide variety of samples. The 5 axis motorized manipulator can inspect samples all angles and thus, achieve a complete inspection. It can also be mobile with its installation in a trailer (optional), allowing to move over a wide area and respond effectively to customer requests.

- A manipulator with horizontal rotating motion
- An industrial robot with multiple axes
- Inspection Suite of software

**AIS230RD** - **Aerospace, Automotive, Composite and large objects**

- The AIS230RD has been created to inspect metallic and non-metallic components. It has been built for every single element to be configurable and highly flexible to be used in different applications in digital radiography. The system is built around a robot for the detector/manipulator integration in order to provide the user with every possible inspection angle for any components that can be fitted on the main manipulator. All sequences of inspection can be unique or repeated using the ‘record and play’ functions.

- A control desk
- Inspection Suite of software

**MAIN CHARACTERISTICS**

- A 9 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit (14 or 16 bits)
- A diaphragm 4 shutters (CLMT 4-4)
- A control desk

**APPLICATIONS**

Multipurpose real-time inspection system

The AIS212 has been created with the aim to automate the inspection of composite material with honeycomb structure and as a result to accelerate the inspection process. Thanks to its 9 motorized axes and with the different software developed by our engineers, the AIS212 allows the records of different motions the operator needs in order to radiography the whole sample with only one action. Every picture is then saved on a server database and can be processed by our Image processing system IPS012.

**MAIN CHARACTERISTICS**

- A 9 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit
- A control unit type LS1
- A control desk

**APPLICATIONS**

Aerospace, Automotive, Composite and large objects

**AIS230** - **Multipurpose real-time inspection system**

- The AIS230 has been created to inspect metallic and non-metallic components. It has been built for every single element to be configurable and highly flexible to be used in different applications in digital radiography. The system is built around a robot for the detector/manipulator integration in order to provide the user with every possible inspection angle for any components that can be fitted on the main manipulator. All sequences of inspection can be unique or repeated using the ‘record and play’ functions.

- A control desk
- Inspection Suite of software

**MAIN CHARACTERISTICS**

- A shielded cabinet (optional)
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit
- A control desk
- A control unit type LS1
- A control desk

**APPLICATIONS**

Aerospace, Automotive, Composite and large objects

**AIS958 - Small to middle size components**

- Very compact complete digital X-ray system allowing the inspection of a wide variety of samples with different thicknesses. This shielded cabinets includes a directional X-ray generator from Balteset range. The cabinets are made of a steel structure with lead reinforcement «sandwich» type assembly (steel-steel-steel). Can be equipped with a rotating plate (optional).

- A control desk
- Inspection Suite of software

**MAIN CHARACTERISTICS**

- A shielded cabinet
- A 5 axes motorized manipulator
- An X-ray generator type KSD
- An X-ray tube head type TSD or TSC
- A flat panel FP Digit (14 or 16 bits)
- A diaphragm 4 shutters (CLMT 4-4)
- A control desk

**APPLICATIONS**

Multipurpose real-time inspection system

The AIS129 has been created with the aim to automate the inspection of composite material with honeycomb structure and as a result to accelerate the inspection process. Thanks to its 9 motorized axes and with the different software developed by our engineers, the AIS129 allows the records of different motions the operator needs in order to radiography the whole sample with only one action. Every picture is then saved on a server database and can be processed by our Image processing system IPS012.

**MAIN CHARACTERISTICS**

- A 9 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit
- A control unit type LS1
- A control desk

**APPLICATIONS**

Aerospace, Automotive, Composite and large objects

**AIS956** - **Small to middle size components**

- Very compact complete digital X-ray system allowing the inspection of a wide variety of samples with different thicknesses. This shielded cabinets includes a directional X-ray generator from Balteset range. The cabinets are made of a steel structure with lead reinforcement «sandwich» type assembly (steel-steel-steel). Can be equipped with a rotating plate (optional).

- A control desk
- Inspection Suite of software

**MAIN CHARACTERISTICS**

- A shielded cabinet
- A 5 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit (14 or 16 bits)
- A diaphragm 4 shutters (CLMT 4-4)
- A control desk

**APPLICATIONS**

Multipurpose real-time inspection system

The AIS956 has been created with the aim to automate the inspection of composite material with honeycomb structure and as a result to accelerate the inspection process. Thanks to its 9 motorized axes and with the different software developed by our engineers, the AIS956 allows the records of different motions the operator needs in order to radiography the whole sample with only one action. Every picture is then saved on a server database and can be processed by our Image processing system IPS012.

**MAIN CHARACTERISTICS**

- A 9 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit
- A control unit type LS1
- A control desk

**APPLICATIONS**

Aerospace, Automotive, Composite and large objects

**AIS947** - **Small to middle size components**

- Very compact complete digital X-ray system allowing the inspection of a wide variety of samples with different thicknesses. This shielded cabinets includes a directional X-ray generator from Balteset range. The cabinets are made of a steel structure with lead reinforcement «sandwich» type assembly (steel-steel-steel). Can be equipped with a rotating plate (optional).

- A control desk
- Inspection Suite of software

**MAIN CHARACTERISTICS**

- A shielded cabinet
- A 5 axes motorized manipulator
- An X-ray generator type KSD
- An x-ray tube head type TSD or TSC
- A flat panel FP Digit (14 or 16 bits)
- A diaphragm 4 shutters (CLMT 4-4)
- A control desk

**APPLICATIONS**

Multipurpose real-time inspection system

The AIS947 has been created with the aim to automate the inspection of composite material with honeycomb structure and as a result to accelerate the inspection process. Thanks to its 9 motorized axes and with the different software developed by our engineers, the AIS947 allows the records of different motions the operator needs in order to radiography the whole sample with only one action. Every picture is then saved on a server database and can be processed by our Image processing system IPS012.
Digital detectors have become unavoidable in Radiography. Benefiting from fast electronics progresses and also from volume production which has driven prices down and quality standards up. Digital detectors have now reached all sectors of Industries and have been adapted to fit to the most stringent requirements like harsh environment, high and very high energies, etc…

Digital imaging is not only taking care of environmental aspects by removing chemical processes in radiography, but also improves production efficiency and quality by providing faster and better images with larger latitude for increased legibility of indications.

But detectors themselves are useless without the right software to use them and process snapshots. This is why Balteau has designed a modular software solution able to control & process every part of a radioscopic installation.
**FLAT PANELS & LDA**

Flat panels are a combination of electronic and Silicon technologies which gives a direct conversion media for displaying radiographic images instead of using films. Flat panels are basically a two dimension array of detectors which sensitivity is 10 to 100 times greater than conventional films. This helps in reducing exposure time but also gives an extended range of thicknesses with the same use of energy. Balteau provides a wide range of flat panels of different sizes, dimensions and pitches to fit in your applications and requirements with also a "Phantom" allowing calibrations. Please contact us with your requirements.

**ACQUISITION**

Detectors module

Drives detectors such as flat panel or digital camera. Showing images in real time, the user can take snapshot whenever he’s satisfied and it will be automatically stored on the selected disk. This module can support Diconde, Dicom, TIFF, JPEG, BMP and raw images.

**XRRC**

X-Ray Remote Control

Connects to the X-ray source using a serial link and is able to control all operations remotely, directly on the computer screen. Allowing you to interact with the mA, kV, start and stop the X-ray from running, view of the tube characteristics and state, start and stop preheating.

**ARC**

Auto Remote Control

This module will control the motors of the equipment, such as manipulators, doors, etc. It works with the latest technology and allows up to 9 axes. This module can also be driven by remote control when used for teaching inspection process.

**DRC**

Diaphragm Remote Control

Controls the motors of the different shutters of the collimator. It works with the latest technology regarding motors control and allows up to 4 shutters.

**Image converter**

DICOM to AVI

DICOM2AVI is stand alone software and also an add-on to IPS012. It will convert high quality DCM images into a more compact and portable AVI file for sharing with customers or third parties. It uses native Windows Media Player or any other basic video player for AVI generated into an intelligible image that you will be able to store, process, print or transfer to other users. Based on a Windows platform, this software is embedding all common and usual processing algorithms. Combined with the acquisition module, snapshots can be sent directly to the IPS as long as computers are plugged on the same network.

**Type of detectors:**
- Image intensifier (3x)
- Flat panel (FPdigit)
- Linear Detector Array

**Type of sources:**
- Balteau NDT
- Others

**Type of motion objects:**
- Motor drive
- Low torque
- High torque

**Type of collimators:**
- Balteau NDT CLMT
- Others

**INSPECTION SUITE**

A complete suite of software made of modules for each part of your inspection system able to communicate between each other but not only. Discover what can offer Balteau NDT Inspection Suite. From manipulator motions to source settings, every step of your inspection can be previously taught and recorded to the system to be obtained from the database when it is needed. All modules combined offer the most powerful solution available on the market of x-ray inspection.

**AUTOMATION**

Module integrator

Automation is the module that will merge and lead all others such as XRRC, ARC, CNC, etc. into one window and offer access to all controllers on only one screen. Automation also includes a teaching mode (optional) which will allow records of motions, x-ray settings, time of exposure, etc. to automate the inspection of components. A database add-on (optional) is also available which will memorise, store and indexed all data recorded to allow an easy retrieval by doing a research on the metadata.

**IPS012**

Image Processing System

IPS is the Image Processing System that will convert the electronic data into an intelligible image that you will be able to store, process, print or transfer to other users. Based on a Windows platform, this software is embedding all common and usual processing algorithms. Combined with the acquisition module, snapshots can be sent directly to the IPS as long as computers are plugged on the same network.

**Possible add-on:**
- 3D: 3D Basic Spatial Resolution
- Diconde: Diconde reader
- SNR: Signal to Noise Ratio
- DDR: Database

**DIGITAL IMAGING**

Balteau has been a leader in the field of Digital Imaging for over 40 years. Our offerings include a wide range of digital systems, including X-ray, CT, MRI, and more. We provide a full suite of software for integration with our hardware, allowing for seamless workflow and improved efficiency. Contact us today to learn more about how we can help you.

**DIGITAL X-RAY**

Balteau NDT offers a range of digital X-ray systems for non-destructive testing. Our systems are designed for high-quality imaging and are ideal for use in a variety of industries. We provide a range of options to suit your specific needs, from compact units for small applications to large systems for heavy-duty use. Contact us today to learn more about our digital X-ray solutions.

**IMAGE ACQUISITION**

Balteau NDT offers a range of image acquisition systems for use in various industries. Our systems are designed for high-quality imaging and are ideal for use in a variety of applications, from medical imaging to industrial inspection. We provide a range of options to suit your specific needs, from compact units for small applications to large systems for heavy-duty use. Contact us today to learn more about our image acquisition solutions.

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ACCESSORIES
For Balteau products, safety, measurement & quality improvement
Balteau offers a lot of different accessories made to serve the existing ranges of products or to ensure a complete inspection from beginning to end with Balteau’s products.

**ACCESSORIES**

Balteau offers also other accessories such as:


**AVARA/P**

Audible visible automatic radiation alert
AVARA-P is the unavoidable tool for an efficient control of a specific area in order to guarantee a maximum security to the operator and other people standing close to the working zone.

**CLIGNOTIX**

Warning flashing light with 20 m cable
An external warning Flash light (Clignotix) can be connected to the control unit, indicating the emission of X-rays.

**AVARA/C**

Audible visible automatic radiation alert
AVARA-C is the cabin version of the portable version of the avara, allowing the operator to monitor closely the working area.

**HYDRAULIC STAND**

Hydraulic stand with yoke and cradle
The X-ray beam can be oriented at any angle between the vertical and horizontal positions. The crane can be mounted with any of the tubeheads and is mounted on the hydraulic appropriate clamp.

**TRIPOD**

Tripod stand for tubehead
This aluminum robust device is used to ease the work of the operator. The shoulder strap makes the carrying of this tripod very convenient.

**UTS01**

Universal stand, mechanical firming
The UTS01 is an assistance for the tube positioning. The tube is held by a strong steel tubing which gives the ability to move the tube in three different axes.

**LEAD OBTURATOR**

Led obturator for preheating
Ensuring better safety of the user while preheating and also lengthen the life of a digital camera such as flat panels or bix pen, available for Baltospot & Baltograph.

**LASER CENTERING DEVICE**

Laser centering device
It is a module that has to be attached to the window the tubehead. It consists of a metallic attachment with a smaller laser pen, available for Baltospot & Baltograph.

**DIAPHRAGM**

Diaphragm 10 x 48 mm or 10 x 24 mm
Using diaphragms will help having a better quality of the image taken and also lower calculation errors. It is easy to use thanks to the joystick and the simple menu.

**PEX01**

Personal exposure assistant - PEX01
It gives you the right exposure time and eliminates the risks of retaken due to calculation errors. It is easy to use thanks to the joystick and the simple menu.

**POWER GENERATOR**

Power generator 4.2 KVA single 50 Hz 230V/3200 Watts - fuel
Thanks to our equipments ready to work on power generator, Balteau provides a solution to work in every environment, even when there is no power available.

**RING LEAD SCREEN**

Ring lead screen allowing directional shot and centering rods kit
Most of your work is done with a panoramic tube but sometimes a directional beam would be useful? This ring lead screen is your solution.

**FLS02**

Four legs support (FLS02)
This four legs stand facilitates the accurate positioning of the generator to the support. Units are surrounded and protected by a steel frame which can be security fastened on the height adjustable legs.

**PROTECTIVE CRADLE**

Protective cradle
The cradle provides good protection for directional generators against shocks and simplifies their handling. It can be easily turned into a four leg stand or adapted to the hydraulic stand.

**TRANSPORT CASE**

Transport case
The best way to transport balteau’s generators and it’s accessories is this transport case, protecting and securing the equipment at all time.

**WATER SECURITY BOX**

Water security box
designed to be used on water cooling network or with water cooling unit without security. The box will permanently verify the pressure and the temperature of the water used to cool down the anode of the tubehead.

**PREHEATING BOX**

Preheating box for tubehead
To ensure a safe environment during preheating, a shielded box has been designed by Balteau where the tubehead can be placed.

**LS1 REMOTE CONTROL**

LS1 Remote control
When inspection can’t be made in a shielded cabinet, the security of the user can be kept, thanks to this remote control with up to 40m cable plugging to the LS1 control unit.