



COMPANY PROFILE



Who We Are

TRIÓNICA Moçambique, Lda is a mozabican company that has been in market for over than 15 years, with the aim of developing the supply of equipment in five fundamentals areas:

- Research and Teaching (Primary, Technical and High Schools)
- Health
- Environment
- Mines
- Water



Market

Triónica Moçambique Lda., is based in Maputo City – Mozambique, with commercial and technical coverage throughout the mozambican territory.

Customers:

- Ministries;
- Teaching Institutions;
- Water Distributors;
- Builders;
- Public and Private Companies;
- NGOs / International Organizations



Human Resources and Technical Resources

Human Resources:

- 20 Permanent Officers with Higher and Technical –Medium qualification level;
- 10 a 15 hired per Project, usually lower qualification and associates with logistics and assembly.



Logistic:

- 2 Heavy and e 1 light trucks;
- 4 Light vehicles for after-sales assistance services;
- 1 Warehouse with pátio 100 m2.



Human Resources and Technical Resources

Techical Assistance :

- 5 Permanents with Higher and Technical-Medium qualification level;
- Technical Equipment for diagnostic e repairing faults.

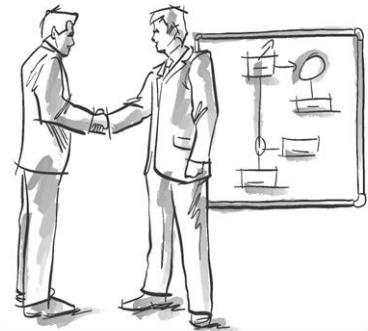


Training:

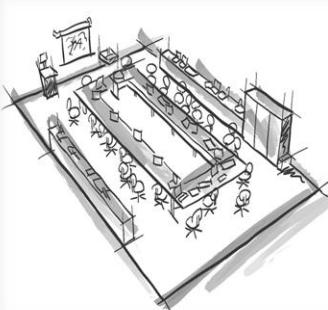
- Operational Equipment;
- Content technician in various engineering áreas, carried out by certified trainers and over 20 years of experience.



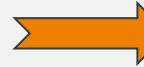
Services



CONSULTING AND
PLANNING ...



CUSTOM SOLUTION ...



INSTALATION



TRAINING



...ADAPTED TO YOUR
NEED



... 3D LAYOUT OF
LABORATORIES



...TEACHING TRAINING



... WARRANTY AND
AFTER-SALES SERVICES



Research & Teaching Division



Investigação
Ensino

Didactic and Scientific Equipment

Research & Teaching

WE PROVIDE:

Didactic and Scientific Equipment

Laboratory Equipment

Geophysical Equipment & Civil Engineering

Interactive Whiteboards / Interactive Panels

School Furniture and Laboratory

Oil & Gas

Sports Equipment



Research & Teaching

Didactic and Scientific Equipment

Injection Systems Learning Kit



Fluid Mechanics Learning Kit

Laboratories and Equipment for Various Teaching Areas



Learning Kit; Demonstration of Operation Heat Pump



Kits and Equipment Welding Systems

Research & Teaching



Machine Theory and Material Properties



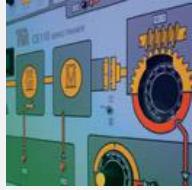
Structures



Thermodynamics, Heat Transfer



Fluid Mechanics and Hydrology



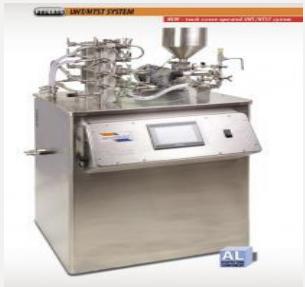
Process Control and Process Engineering

MECHANICAL



Research & Teaching

Didactic and Scientific Equipment



Food Technology



Water treatment



Chemical Engineering and Process Control

FOOD ENVIRONMENT AND TECHNOLOGY

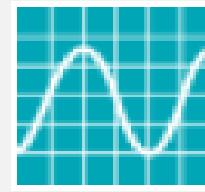


Research & Teaching

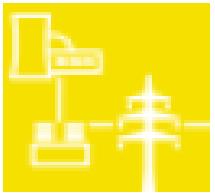
Didactic and Scientific Equipment



Electrical installations



Instrumentation



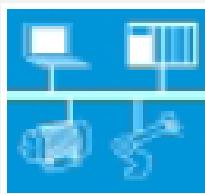
Electric Power
Renewable energy



Process Control



Power Electronics
and Electrical Machines



Automation



Electrical Circuits
and Electronics



Microprocessors



Telecommunications



Automotive Technology

ELECTRICITY AND ELECTRONICS

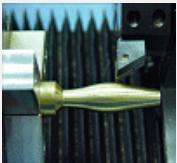


Research & Teaching

Didactic and Scientific Equipment



Robotics



CNC and CAD / CAM machines



Automation and Control



Mechatronics

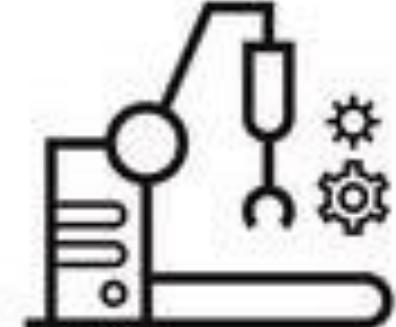
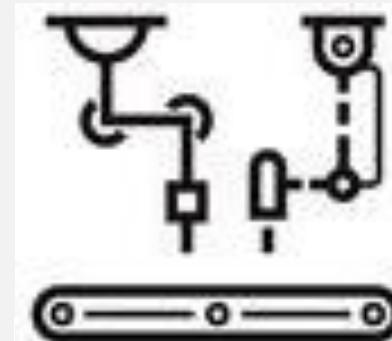


e-Learning



CIM Solutions

AUTOMATION / ROBOTICS



Research & Teaching

Didactic and Scientific Equipment



PHYSICS

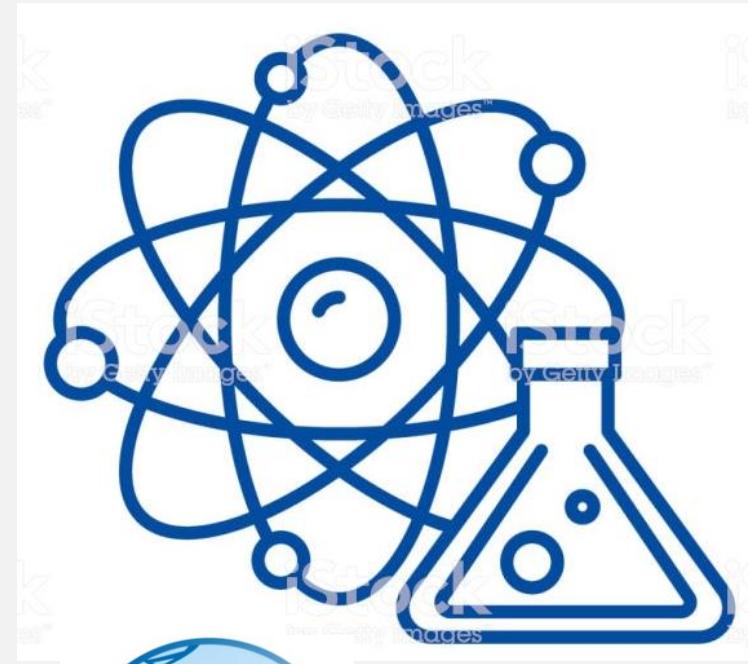


CHEMISTRY



BIOLOGY

NATURAL SCIENCES



Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment for Teaching Areas:

PROCESS CONTROL

INDUSTRY 4.0

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment
for Teaching Areas:

AUTOMOBILE TECHNOLOGY
ELECTRONICS &
MECHATRONICS

ENGINE TECHNOLOGY

SUSPENSION AND BRAKES

ALTERNATIVE SYSTEMS
HIGH VOLTAGE UNITS

HYBRID SYSTEMS

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment
for Teaching Areas:

AUTOMOBILE TECHNOLOGY
ELECTRONICS &
MECHATRONICS

ENGINE TECHNOLOGY

SUSPENSION AND BRAKES

ALTERNATIVE SYSTEMS
HIGH VOLTAGE UNITS

HYBRID SYSTEMS

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment
for Teaching Areas:

**AUTOMOBILE TECHNOLOGY
ELECTRONICS &
MECHATRONICS**

ENGINE TECHNOLOGY

SUSPENSION AND BRAKES

**ALTERNATIVE SYSTEMS
HIGH VOLTAGE UNITS**

HYBRID SYSTEMS

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment for
Teaching Areas:

RENEWABLE ENERGY

Solar Thermal

Solar photovoltaic

Wind

Hydroelectric

Fuel Cells

Environmental monitoring

Hybrid Solutions

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment
for Teaching Areas:

ELECTRICITY

ELECTRICAL INSTALLATIONS

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment for
Teaching Areas:

HVAC

PLUMBING

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment for
Teaching Areas:

METALLOMECHANICAL

Research & Teaching

Didactic and Scientific Equipment



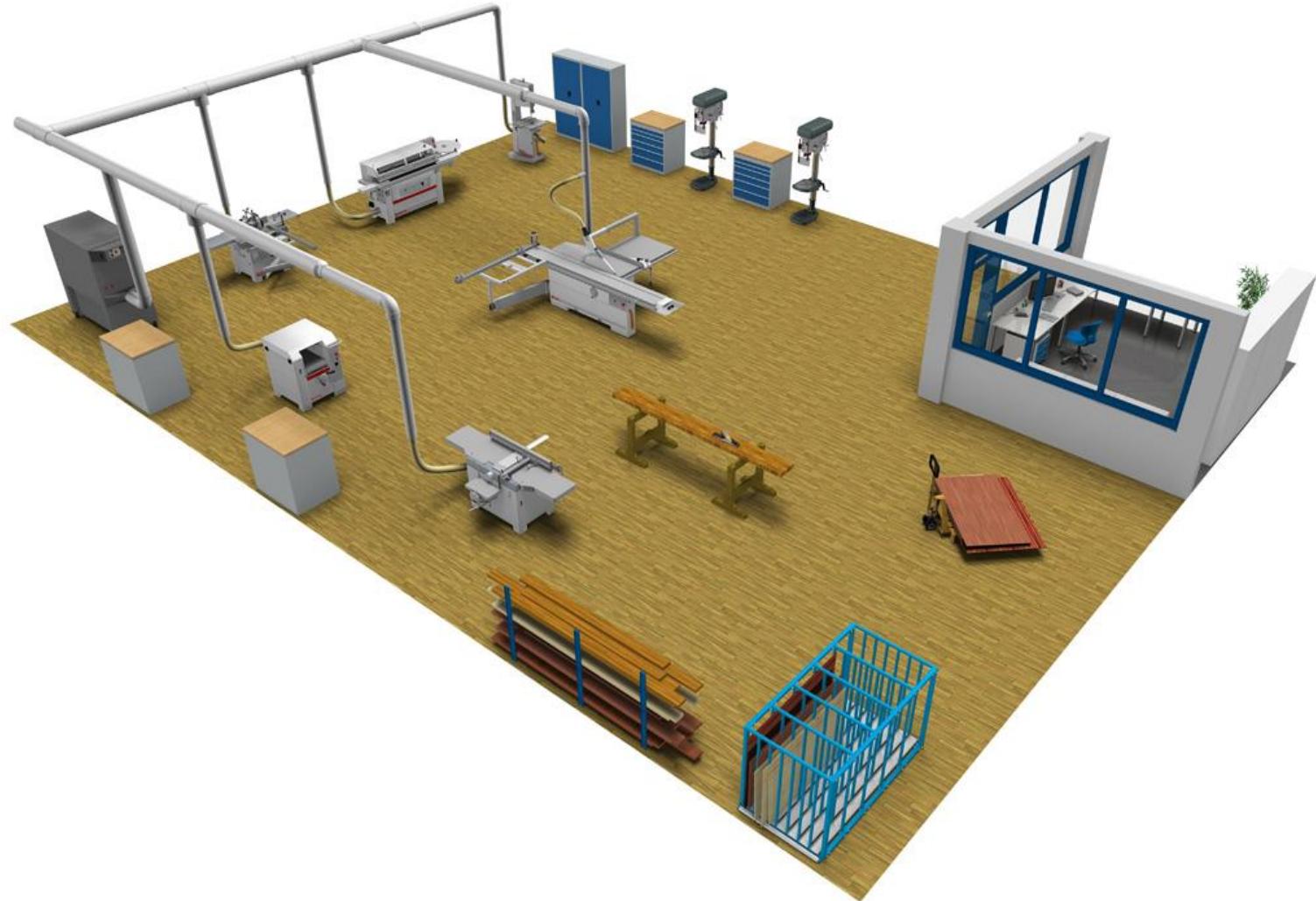
Laboratories and Equipment for
Teaching Areas:

WELDING

METALOMECAÑICA

Research & Teaching

Didactic and Scientific Equipment



Laboratories and Equipment for
Teaching Areas:

CARPENTRY



Investigação
Ensino

Laboratory Equipment

Research & Teaching

Laboratory Equipment

Wide Range of Solutions and Equipment

Agitators; Moisture Analyzers
Autoclaves; Scales; Baths;
Laboratory Bunsen Nozzles:
Laboratory Vacuum Pumps;
Laminar Flow Chambers;
Centrifuges; Water distillers;
Electrochemistry;
Laboratory Cold Equipment;
Spectrophotometers; Laboratory Greenhouses;

... among many others ...



Laboratory Equipment

Research & Teaching

Wide Range of Solutions and Equipment

Vacuum Desiccators; Muffle furnaces;
Laboratory; Chemical Fume Hoods;
Laboratory incubators;
Lyophilizers;
Heating Blankets;
Microscopes; Pipettes;
Vacuum Systems;
Microbiology Techniques;
Microwave technology;
Anatomical models
Glassware;
Laboratory Furniture:

... among many others ...



Laboratories and Equipment for the Areas

Chemistry

Physics

Biology

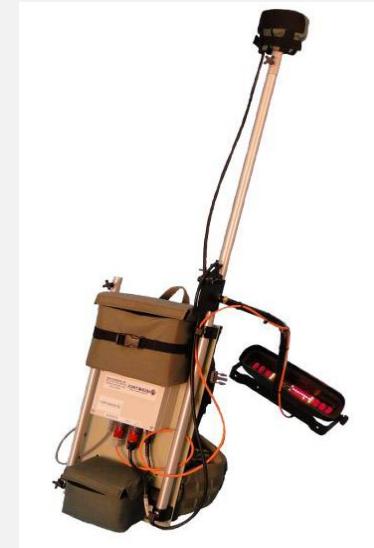


Investigação
Ensino

Geophysical Equipment Civil Engineering

Research & Teaching

Agitators; Moisture Analyzers
Autoclaves; Scales; Baths
Laboratory Bunsen Nozzles
Laboratory Vacuum Pumps
Laminar Flow Chambers
Centrifuges; Water Distillers
Electrochemistry
Laboratory Cold Equipment
Spectrophotometers; Laboratory Greenhouses
Vacuum Desiccators; Muffle Ovens
Laboratory; Chemical Fume Hoods
Laboratory Incubators
Lyophilizers; Heating Blankets
Microscopes; Pipettes
Vacuum Systems
Microbiology Techniques
Microwave Technology
Glassware
Laboratory Furniture

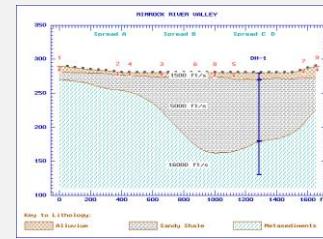


Equipments Geophysics

Equipment for the Areas of
Geophysics

Research & Teaching

Agitators; Moisture Analyzers
Autoclaves; Scales; Baths
Laboratory Bunsen Nozzles
Laboratory Vacuum Pumps
Laminar Flow Chambers
Centrifuges; Water Distillers
Electrochemistry
Laboratory Cold Equipment
Spectrophotometers; Laboratory Greenhouses
Vacuum Desiccators; Muffle Ovens
Laboratory; Chemical Fume Hoods
Laboratory Incubators
Lyophilizers; Heating Blankets
Microscopes; Pipettes
Vacuum Systems
Microbiology Techniques
Microwave Technology
Glassware
Laboratory Furniture



Equipamentos Geofísica

Equipment for the Areas of
Geophysics

Research & Teaching



CONCRETE



ASPHALTS



SOIL MECHANICS

Equipment for the Areas of
civil Engineering



Research & Teaching

Frames and Interactive Solutions



Equipments

Interactive Whiteboards

Interactive panels



Investigação
Ensino

Oil & Gas

Research & Teaching

Oil & Gas

Fully Instrumented
Distillation Column Bench
(Downstream)



Multi-Variable Process
Control Bench



Bench Control Chemical
Analytical Processes

Equipment for Oil & Gas Areas



Upstream Oil and Gas
Production Platform

Research & Teaching

Oil & Gas Downstream & Upstream

Inspection Unit for Industry (IUI)



Mechanical Maintenance Unit



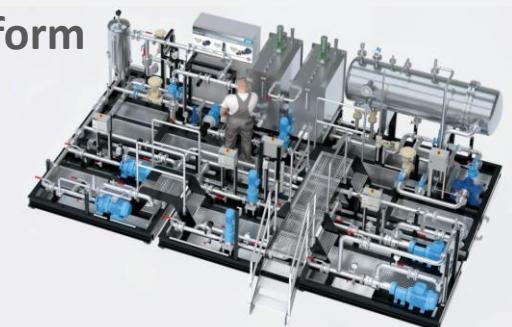
Process Training Unit



Wellhead and X-Mas Tree Operation and Maintenance Training Unit



Integrated Pilot Platform



Pumping Process Training Unit



Investigação
Ensino

EPI's e EPC's Anti-Fall

EQUIPMENTS

PPE's and Anti-Fall EPC's for Work at Height

We sell Anti-Fall Equipment for Work at Height,
from the main European manufacturers



Harnesses
Extreme Environments
Fall Vests
Fall Coats
Fall Suits
Fall Protection Accessories
Positioning Longs
Longes
Connectors
Connection Elements
Descenders
Lifts
Pulleys
Anchor Points
Anchoring Lines
Anchoring device
Gloves and Helmets
Strings
Carrying Bags
Rescue
Retractable Blocks
Blockers and Fall Arrestors
Life Lines Kits
FALL SAFE® EZYID™
Certified masks

EQUIPMENTS

PPE's and Anti-Fall EPC's for Work at Height



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Extreme Environments
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FALL SAFE® EZYID™
Certified masks



**Investigaçāo
Ensino**

Laboratory Furniture School & University Furniture Libraries and Auditoriums

Laboratory Furniture

Research & Teaching



Equipments



Laboratory Furniture



Research & Teaching

School Furniture University Furniture



Equipments

School Wallets
Classroom boards
Student tables
Teachers' desks
Management secretaries
Reception desks
Meeting tables
Cabinets / shelves / lockers

... among many others ...

Libraries

Research & Teaching



Equipments

Reception desks

Reception desks

Reading Tables

Bookcases

Containers

Mobile Structures

Meeting tables

Sofas and counters

Reception

... among many others ...

Research & Teaching

Auditoriums

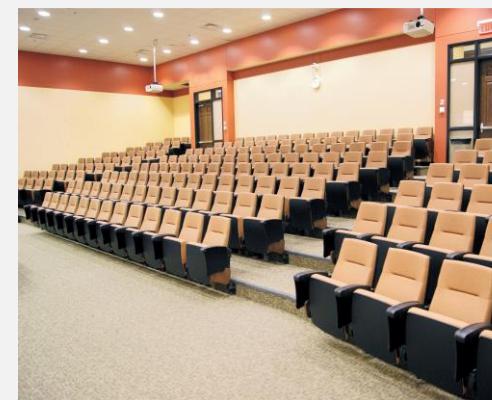
Equipments

Auditorium Chair
University Auditoriums
Amphitheaters

Pupils

Projection screens
Sound system
Microphones

... among many others ...





Investigação
Ensino

Sport



Andebol Atletismo Badminton Ballet



Basquetebol Corfebol Escalada Fitness



Futebol Ginástica Hidroginástica Hóquei



Judo Natação Orientação



Patinagem Psicomotricidade Rugbi Ténis



Ténis Mesa Tiro Arco Voleibol Jog. Alternativos



Mat. Treino Medicina Terapia Equipamentos



Diversos Instalações – Serviço Pós Venda

Bancadas – Tribunas



Desporto

Soccer

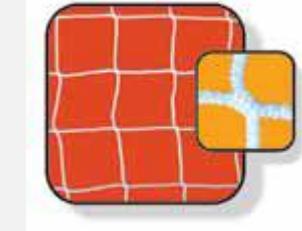


Aluminum football goal 11; Snap fastening in sleeves on the ground; According to the requirements of UEFA, FIFA, FPF and EN748;

Official measures:

7.32x2.44m (interior measurements);

Construction in aluminum profile of 120x2,5mm reinforced internally and with special groove to receive the fixing parts of the nets; Parts for fixing the PVC net with a rounded shape to prevent injuries;



Equipment Range

Official Football Goals

Removable Soccer Goals

Networks and Accessories

Balls

Training Equipment

Equipment - Infrastructures

Cabins



Sport

Basketball



High competition removable basketball unit;
Made in structural profile; Electric lifting system with automatic stop on the way up and down; 12mm tempered glass table; 105kg tilting hoop - EN1270 - and 6.5cm net; Ring connected directly to the main arm without exerting force on the table; Table, front, side and arm protections included; Includes support for 24 "markers; Prepared to be anchored to the ground; Displacement: when folded, the car automatically rises, remaining on the wheels; it can be easily moved by a single person; when it is elevated, it is on the supports, it is not possible to move it; Complies with EN 1270 and all FIBA, FPB and LCB requirements.



Equipments

Equipment Range

Officials Table

Removable Tables

Networks and Accessories

Balls

Sport

Handball



High competition handball goals;
Aluminum handball goal - competition; Interior reinforced aluminum profile construction with special groove to receive the fixing parts of the nets; Parts for fixing the PVC net with a rounded shape to prevent injuries;
Official measures 3.0x2.0m (interior measures); Demountable front - 80mm square lacquered section with round edges;
Dismountable rear - 32mm galvanized round tube; Prepared for fixing to the ground at 4 points per goal;
Complies with safety standards EN749;
5-year anti-corrosion warranty;



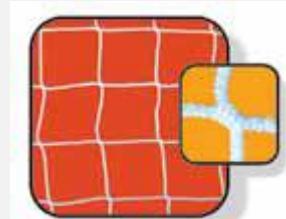
Equipaments

Equipment Range

Beacons

Networks and Accessories

Balls



TRIONICA
MOÇAMBIQUE

Sport

Volleyball



High competition volleyball poles
to fit in the ground;

Construction in 120mm lacquered aluminum profile with internal reinforcement; Telescopic system for height adjustment; Allows you to regulate all regulatory heights - inscription of heights on the pole itself; Internal mechanical tensioner driven by a removable crank; The clamping and tensioning system placed outside the field prevents accidents and allows the use of protections;
Complies with standard EN1271;



Equipaments

Equipment Range

Official Posts

Networks and Accessories

Balls

Referee Chair



Sport

Hoquei



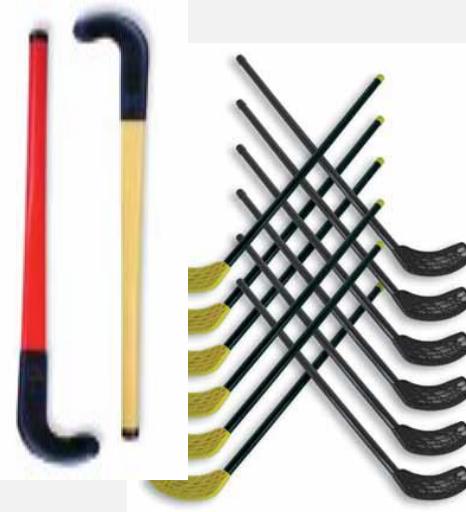
Roller hockey goal

Dimensions: Width: 1.70m; Height: 1.05m Equipment approved by F.P.

Manufactured in accordance with FIRoller Sports Posts and steel beam with anti-corrosive treatment, circular section with a diameter of 3 "in corners (according to international regulations) 2-component acrylic enamel painting Standard color: Frame Color -Fluorescent orange;

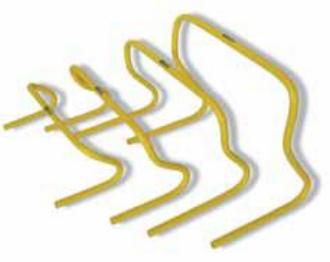
Rear frame: White Complies with EN1271;

Removable table for roller hockey Equipment Approved by F.P. Skating
Manufactured in accordance with the rules of the F.I.Roller Sports.
2.0m long and 1.0 high panels 4 1.0m half doors



Sport

Training Equipment



Sport

Sports Fields and Pavilions



In our range of solutions we have different qualities of fibrilated artificial grass, monofilament, including the latest generation of synthetic grass monofilament yarns in the central nerve of extreme strength and smoothness.

With solutions for all modalities, our lawns are designed, produced and installed guaranteeing the maximum quality, performance and protection of the athlete.

As a result, our lawns comply with the requirements established by FIFA (trials) reaching the highest standards of quality certificates receiving the classification of FIFA 1 and 2 stars.



Sport

Sports Fields and Pavilions



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Health Division

Health

WE PROVIDE:

**General Equipment: Doctors; Training and Simulation
Hospital Furniture; Operations; Laboratory
Imaging (MRI; CT; X-ray)
Tuberculosis Detection System - CAD4TB
Mobile Clinics
Eye Screening - Diabetic Retinopathy
and macular degeneration
BabyCAD
Tele - Radiology
Diagnostic Centers**



Health

Equipments general



Medical equipment

Training and Simulation



Health

Equipments general



Hospital Furniture
Operation Rooms



Health

Equipments general

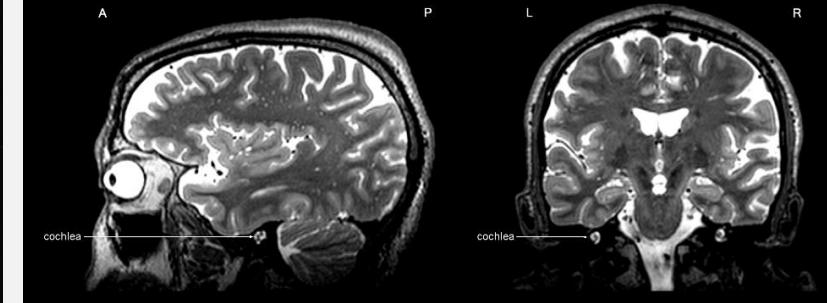
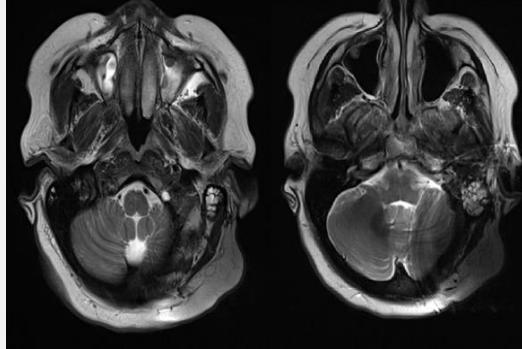
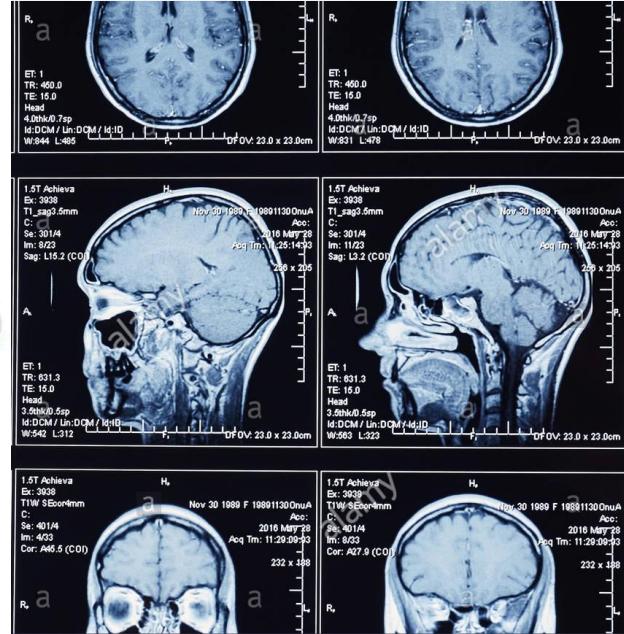


Equipaments

MRI

Ressonance Magnetic

Magnetic resonance imaging (MRI) is a medical imaging technique used in radiology to form images of the anatomy and physiological processes of the body, both in health and in disease. MRI scanners use strong magnetic fields, radio waves and field gradients to image the organs in the body

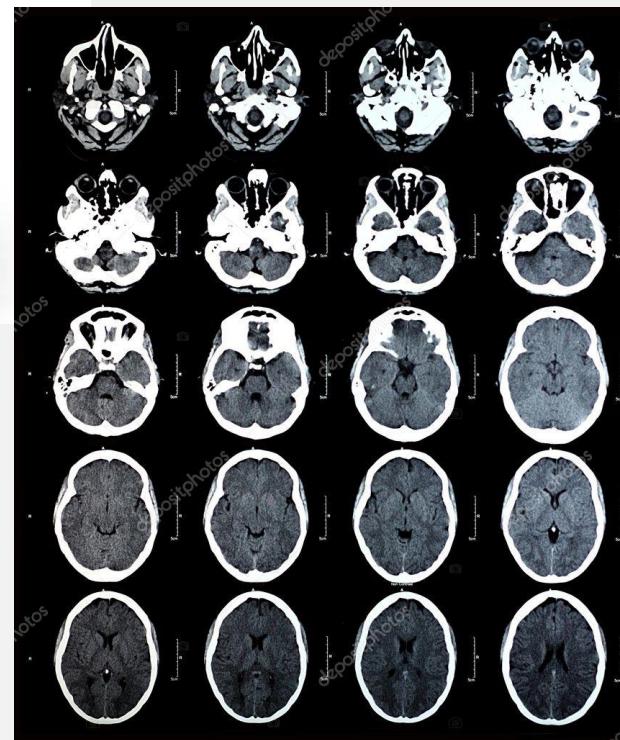
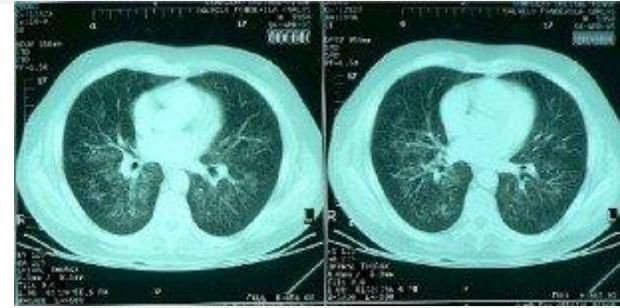
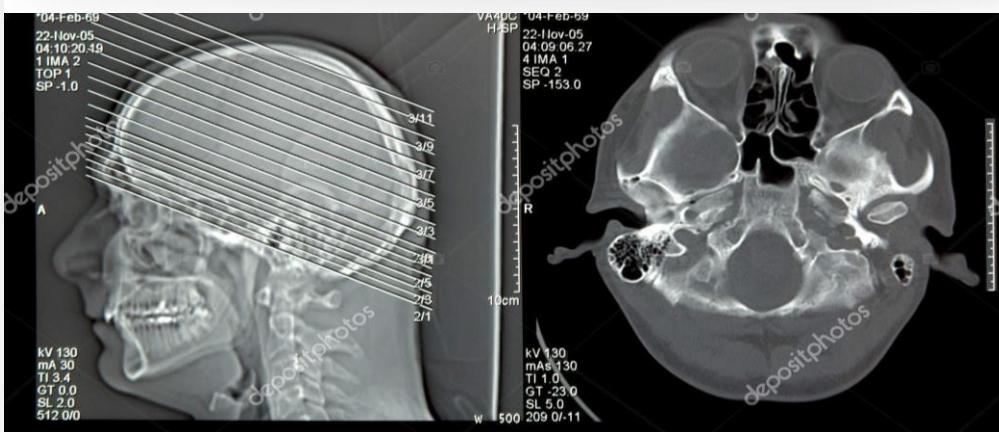


Equipaments

CT

Computed Tomography

Computed tomography originally called computed axial tomography is a complementary diagnostic imaging technique, which consists of an image that represents a section or "slice" of the body. It is obtained through computer processing of information collected after exposing the body to a succession of X-rays. Its main method is to study the attenuation of an X-ray beam during its journey through a segment of the body; however, it is distinguished from conventional radiology by several elements.



Health

Imaging X-ray - MRI - CT



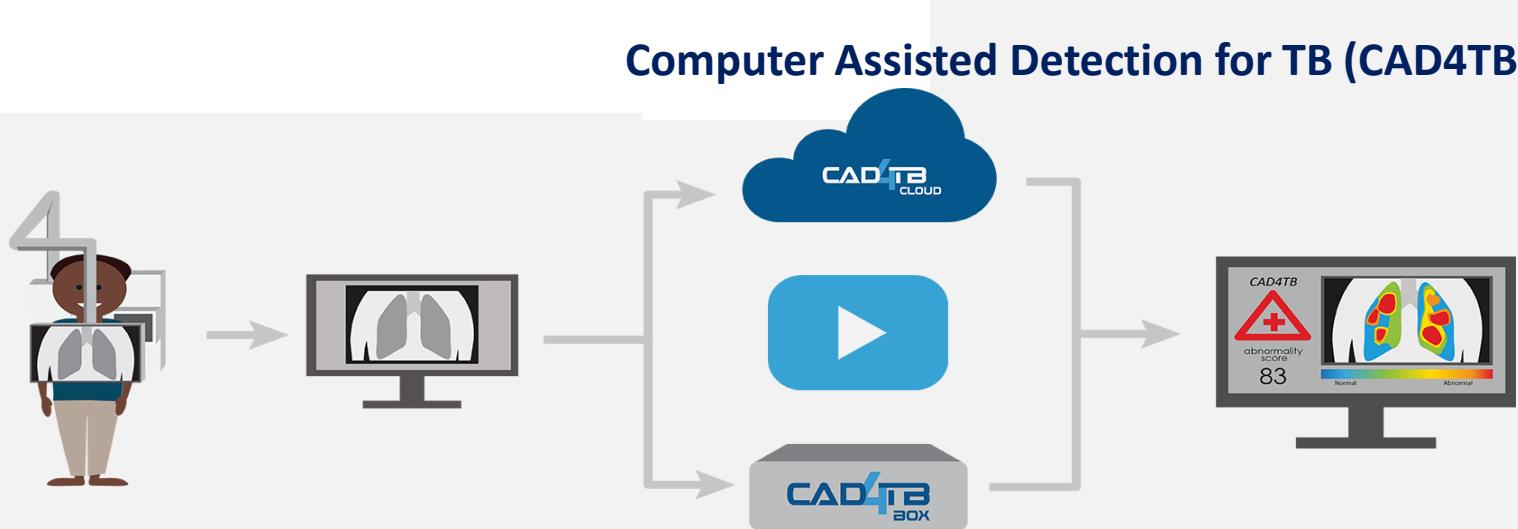
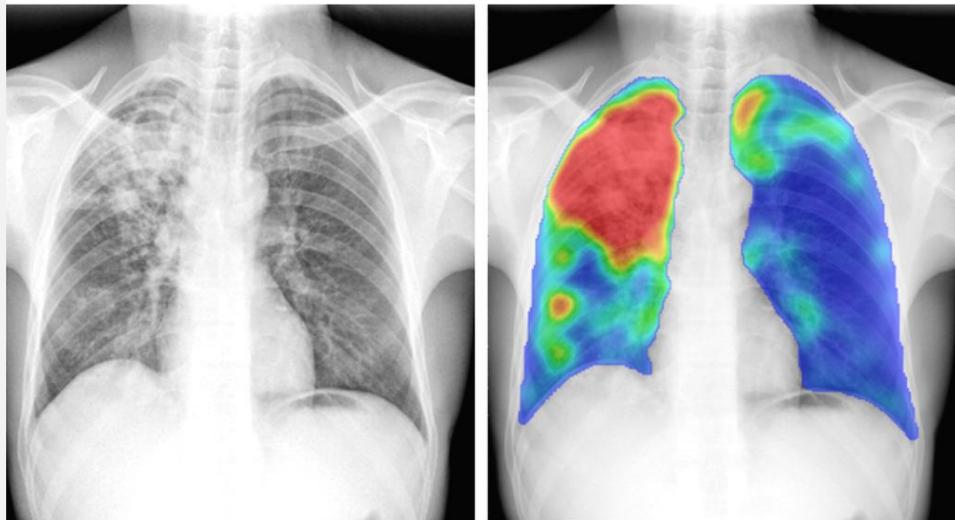
Equipaments

Raio X



Radiography is an imaging technique that uses X-rays to see a material whose composition is not uniform like the human body. A heterogeneous X-ray beam is produced by a generator and projected onto an object. The density and composition of each area determines the amount of X-rays absorbed. The X-rays that pass through are captured behind the object by a detector (be it photographic film or digital detector). A two-dimensional representation of all overlapping structures is then produced.

Tuberculosis Detection Solutions - CAD4TB



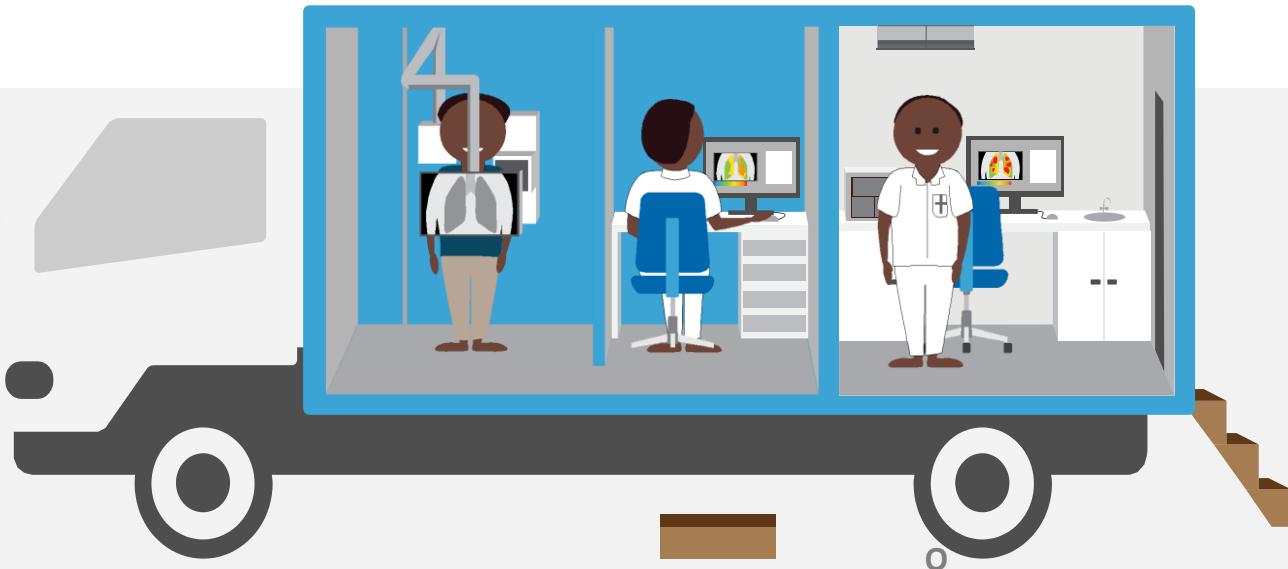
CAD4TB software begins with a quick inspection of a new X-ray image. Normalizes the image to correct the entry of various modalities and then detects the many different abnormal structures that may be related to TB. The system has been trained in detecting these abnormalities by applying deep learning to thousands of healthy and sick X-rays from more than 15 countries. CAD4TB has also received feedback from lung specialists, making it extremely accurate and reliable.

The output of the CAD4TB software is a score between 0 and 100, indicating the probability that the subject in the image has active TB. The score also includes a texture heat map overlaying the original X-ray image that indicates abnormalities. Only if the score of the result is greater than a certain limit, the patient will need a subsequent sputum test to complete the diagnosis. This process reduces the cost and treatment time.

... Biggest TB screening project in the world...

Health

Mobile Clinics



Mobile Clinic with: X-rays, CAD4TB, laboratory, solar panels, air conditioning, Tele-radiology, generator, wifi



Clinicas Moveis

Clinics: Powered by the Sun



Health

Mobile Clinics

Clinicas Moveis



Eye Screening

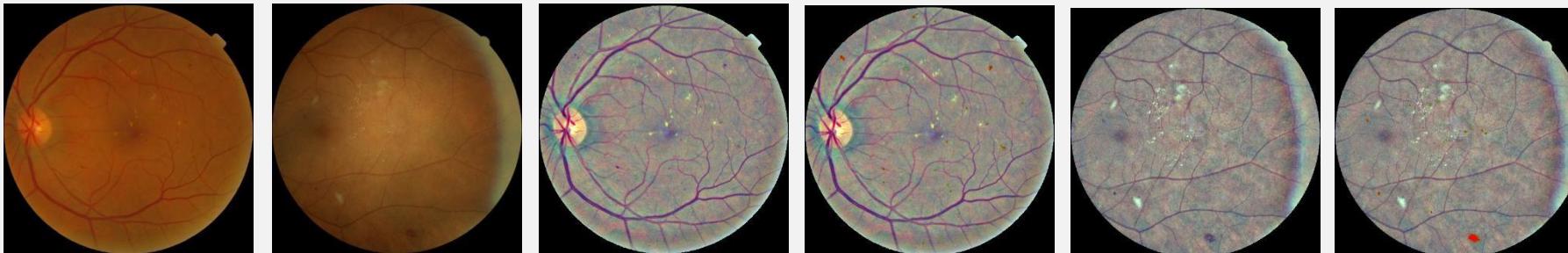
Diabetic retinopathy and macular degeneration

Retina - Computer Aided Detection

RetCAD

RetCAD-DR Automatic detection of patients who should be referred for Diabetic Retinopathy

RetCAD-AMD Automatic detection of patients at high risk of developing advanced age-related macular degeneration



Eye Screening

- Diabetic retinopathy and age-related macular degeneration are one of the most common common retina worldwide
- 285 million visually impaired people worldwide
- Highly disabling
- Early detection of abnormalities leads to cheaper treatments
- 80% reduction in blindness
- Automatic sorting makes this possible.

Pulmonary screening: tuberculosis, silicosis, pneumonia

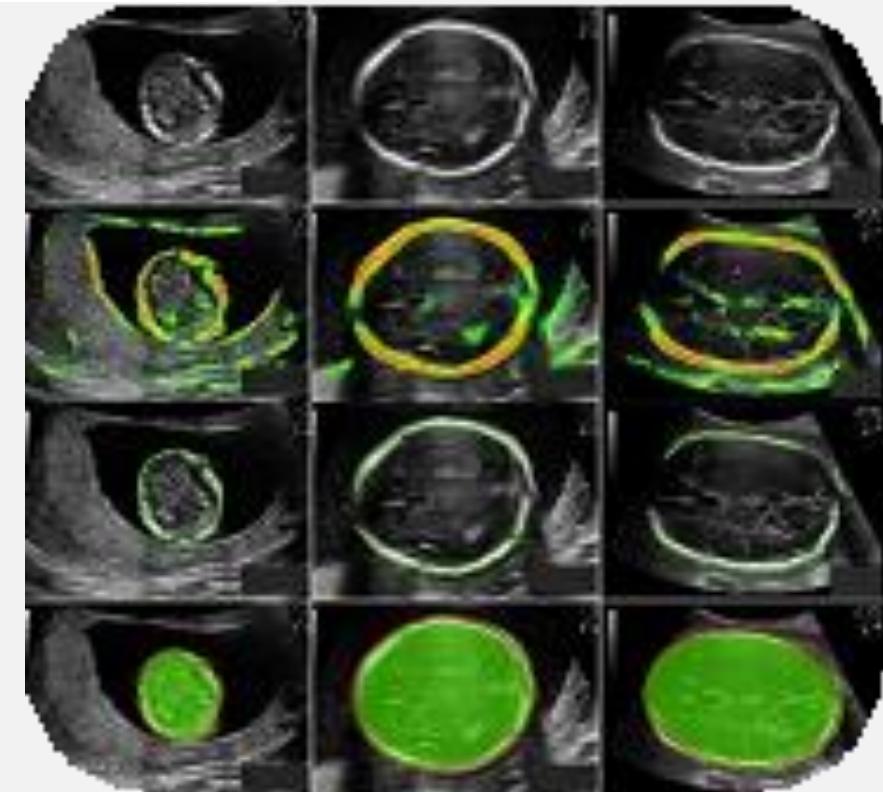
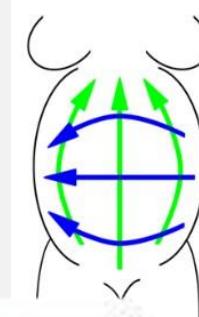
Ultrasound screening: obstetric complications

BabyCAD

- Performing an ultrasound typically requires specialized anatomical knowledge.
- Our obstetric scanning protocol has been validated in Ethiopia and we have shown that a nurse or midwife without prior knowledge of ultrasound can generate a useful dataset of images using 6 "scans".
- Tele-radiology allows remote diagnosis based on the scan data set easily obtained.

BabyCAD:

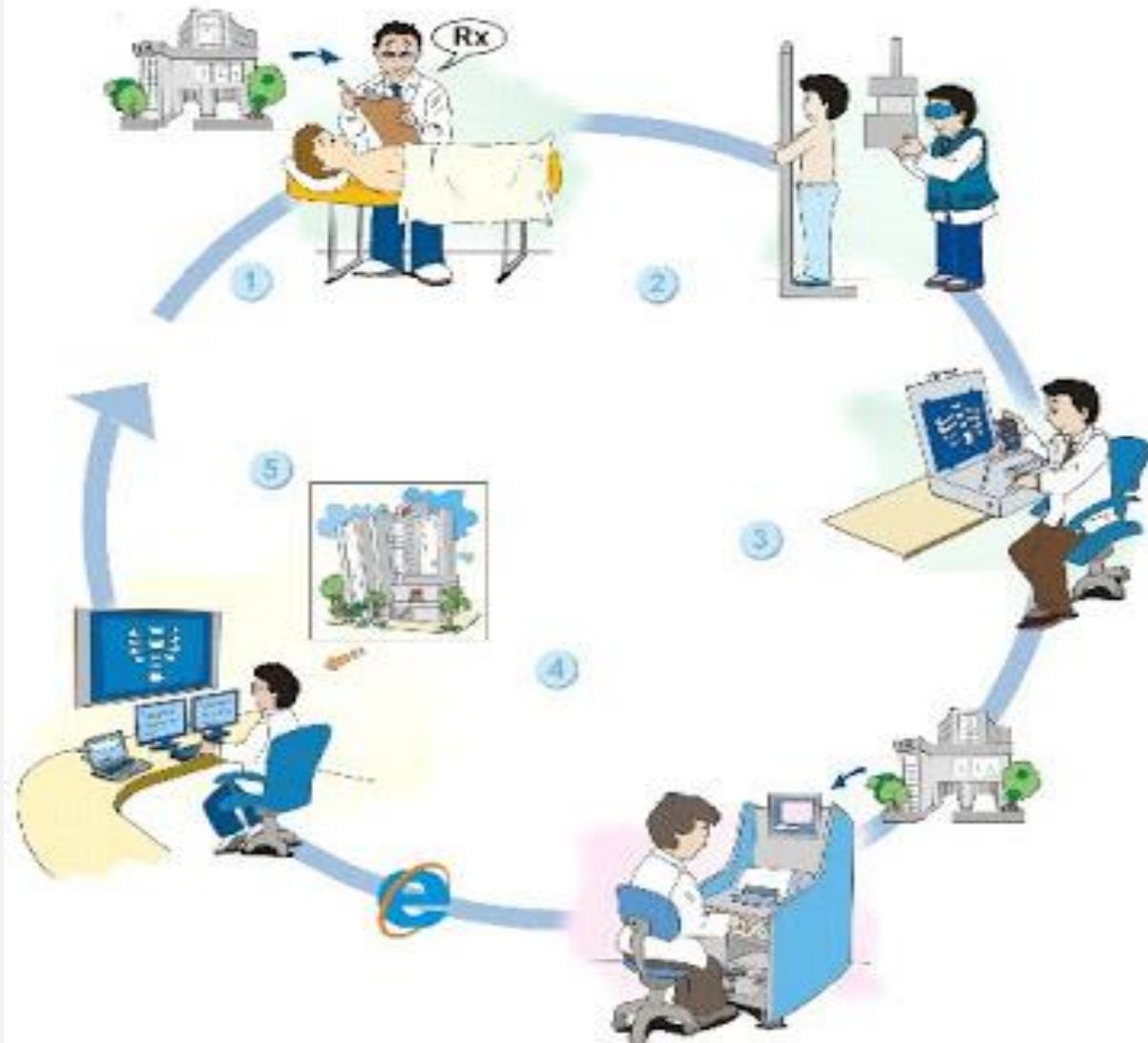
- Automatic fetal age detection
- Position
- Growth of the fetus
- Twins
- Possible expansion to other fields



Exemplo de detecção automática de idade - BabyCAD (HCF)

Health

Tele - Radiology



Tele-Radiology

Teleradiology stands out as one of the specialties of telemedicine and is defined as the use of available information and communication technologies with the aim of allowing remote diagnosis (telediagnosis), issuing a second specialized opinion (teleconsulting), through digital sending of the images, or even participate effectively in Distance Learning in the Medical Community, Undergraduate or Graduate courses.



Health

Diagnostic Centers



Diagnostic Centers and Radiology

High quality same day service - concept
(Diagnostic report in 2-4 hours)

Total integration organized by Delft Imaging Systems

Rogan-Delft / Canon Inc. software

CT, open MRI, X-ray, ultrasound and mammography

Example: Diagnostic Center - Liberia



Ambiente

Environment Division



Ambiente

Water Meters Technologies and Measurement System Water Treatment



WE PROVIDE:

Water Quality Control Equipment

Counters and flow meters

Water Treatment Systems

Instrumentation

Environment

Water Quality Control



Equipment for the control of water quality

APPLICATIONS:

Drinking water, Physical Chemical tests, Micro Biological, toxicities

Industrial systems,

Quality of water resources



Environment

Mechanical Water Meters



Volumetric water meters

In the volumetric water meter there is no turbine, but a piston or ring. It is a container that fills with the liquid inlet and transports a certain volume to the outlet of the meter. The transport phenomenon occurs due to the pressure difference, which is greater at the entrance than at the exit of the device. The plunger performs a circular movement around the axis itself, generating the necessary movements to activate the totalizer. Thereafter, the registration of volumes takes place in the same way as in other water meters.



Single jet water meters

It is the tachometric water meter that has the turbine driven by a single jet of liquid. It is also called a single jet or single jet water meter. Another characteristic of water meters of this type is that the water jet hits the turbine directly, and the water meters can be affected by impurities trapped in the filter. An obstruction of the same can cause the speed of the incidence of the jet on the turbine to increase, changing the precision of the device.



Multi-jet water meters

In these meters the internal mechanism is activated by several jets of water that tangentially affect the turbine. The jets form pairs of forces - one strikes from the right in the AB direction and the other strikes from the left in the BA direction - providing perfect balance to the turbine when in rotation.



Contadores Mecânicos

A mechanical water meter is one with a mechanical transmission system. The turbine movements are mechanically transferred to the set of gears that make up the totalizer, making use of an axis that crosses the separator plate - plate that separates the dry part from the wet part, in the dry hydrometers.

Environment

Mechanical Water Meters



Commercial and industrial water meters

Residential Meters

Single jet (MID) meters

- Magnetic transmission without gears, dry sphere • Rotatable head 360 ° • Pre-installed for pulse emitter • Mechanical indicating device with 2 totalizer options: 5 m³ and 3 sub-multiple drums • DN 15 and 20 mm • Brass body • G¾B and G1B threads • PMA 16 • T30, T50 and T90 • Metrological class B for Qn 1.5 and 2.5m³ / h • R 160 • Application in water • Electromagnetic class E2

Multi-jet type (MID) meters

- Direct magnetic transmission, dry sphere • Mechanical indicating device with 5 m³ drums and 4 submultiple indicators • Pre-equipped with pulse emitter • DN 15, 20, 25, 30, 40 and 50 mm • Longitude 165, 190, 260 , 300 mm • Brass or Polymer body • G3 / 4, G1, G1½, G1½, G2 and G11 / 2 threads • PMA 16 bar • T50 • R 80 and 160 H • Class B • Application in water • Electromagnetic class E2

Volumetric Type Meters (MID)

- Direct magnetic transmission • Pre-equipped with pulse emitter • Mechanical indicating device with 5 encapsulated drums, m³ and 2 submultiples • DN 15, 20, and 25 mm • Length 165, 190 and 260 mm • Brass or Polymer body • G¾B, G1B and G11 / 4B threads (in line) • PMA 16 bar • T50 • R200 or 250 H / V depending on gauges • Class C • Use in cold water • Electromagnetic class E2

Industrial Meters

Woltman Type Meters

- Head with 360 ° rotation of great robustness and easy to read • Pre installation for pulse emitter • Mechanical indicating device with 5 m³ drums and 3 submultiple needles • DN 40 to 300 mm • ISO body • PMA 16 to 25 • T50 • R 100 and 200 • Metrological class greater than B • Electromagnetic class E2 • Application in water

Environment

Electronic Water Meter

Contadores Electrónicos



COMMON FEATURES DN15 to DN300

High precision and weather maintenance (8-12 years)

Battery 12 years (warranty)

Information: how much, how and when water is consumed

Consumption time zones, flow histogram, actual consumption months, weeks

IP 68 protection

Communication: Direct cable, bluetooth for TPL, GSM / GPRS modem and Radio Frequency.

Environment

Prepaid Counters Water Meter

Prepaid Counters

Prepaid water meter system

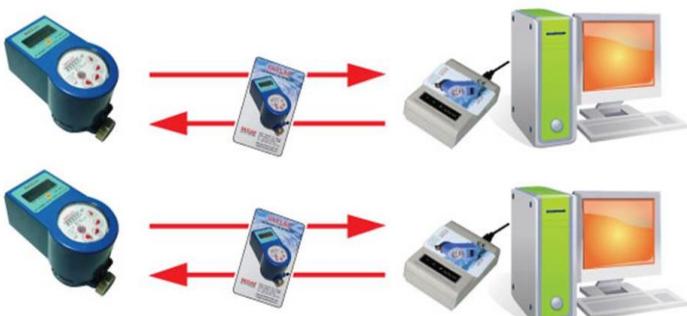
The prepaid system for water meters (commercial & irrigation) is a complete measurement solution, where it provides multiple benefits, both for water supply companies and for users, including guarantee of payment and receipt of overdue debts, in a making control of users' budgets more sustainable.

How it works:

The consumer through the Smart Card, uploads the volume of water he wants at specific points of sale through a very simple way, thus being able to manage the credit and monitor his consumption. When the card balance reaches its end, the water meter valve automatically locks and only opens again when the consumer recharges his Smart Card.

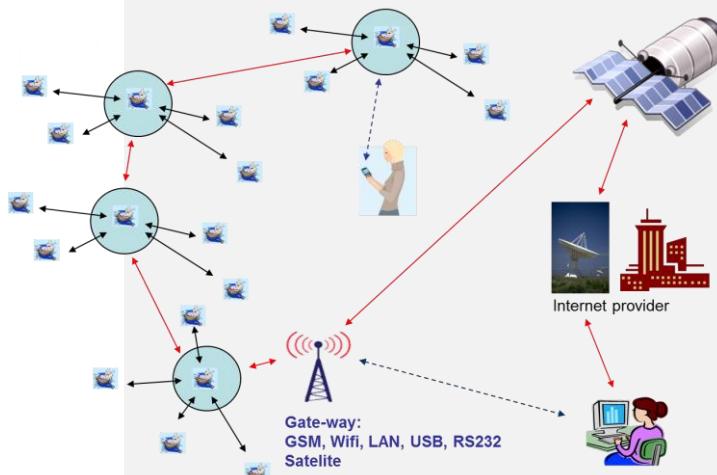
The use of a Smart Card also allows consumers to find out about the water meter battery level, state intervention, period, titles and fees in credit sales at checkpoints. The new rates and information about the period on the Smart Card are updated periodically with each credit load. After the updates are loaded onto the Smart Card, the water meter easily reads the information contained and is updated.

In case of interference, the water meter closes the valve and cuts off water consumption. Local government officials re-establish the water meter functions via authorized smart cards, otherwise the water meter will remain with its valve closed. Each water meter has its own unique Smart Card



Environment

Prepaid Counters Water Meter



Water counting system

Always with a view to continuous improvement in the service provided and following the latest developments in the area of information technologies, WTA developed a global telemetry solution such as Walk - By / Drive-By and by GMS / GPRS / Satellite for cold water meters with the main objectives:

- Improvement in exploration efficiency;
- Reduction of costs involved in manual readings and billing by estimate;
- Elimination of reading errors;
- Water saving;
- Reduced operating costs and saved electricity;
- Possibility of making multiple readings.

Via Walk by / Drive by

The Walk By Drive solution for data acquisition is built by a radio module connected to the meter, which allows radio communication to the data reading and storage console. This communication can be made by the readings operator through the interior of your vehicle (Drive By) or even by walking (Walk By).

Via GSM / GPRS / Satellite

The GMS / GPRS / Satelite solution for data acquisition, is built by a radio module connected to the meter, which allows radio communication to a concentrator where the data is stored, and then sent via GMS / GPRS / Satelito to a server for data processing.

Environment

Flowmeters; Loss Control

Caudelímetros



Flow meters are flow meters that are used to measure, control and regulate electrically conductive fluids in closed conduits, especially in the Water Treatment and Distribution, Food, Chemical and Energy sectors

Flowmeters: electromagnetic

The electromagnetic flowmeter is a device used to measure flow rates in closed conduits, which uses the physical principle that in a conductor moving in a magnetic field an electrical voltage develops at its terminals.

Controlo de Perdas



Environment

Water Production Common Solutions



Containerized Systems for Water Treatment

The containerized layer filtration system is one of the best surface water purification methods on the market. With rates up to 520 GPM, drinking water for construction sites, temporary military bases and industrial uses can be easily produced. We took the benefits of an industrial layered filtration system and made it portable, so that it can be moved when needed or permanently installed elsewhere. All of our containerized systems are designed from the ground up with your needs and specifics in mind, so that you can be guaranteed a unique and high quality treatment system.

Dechlorination is the biggest advantage of multi-layer filtration. The placement of chlorine in water is an effective and economical way to disinfect it, but it makes the water unfit for consumption and may even be toxic in sufficiently high concentrations. Layer filtration can purify chlorinated water, not only removing chlorine itself, but also (depending on the type of layers used) it can eliminate colorings, odors, flavors, suspended matter, silica, heavy metals and acidic contents.

In addition, there are several unique benefits in containerized systems that are not available in fixed installations. In addition to the portability advantages of a system installed in a 12 meter container, these systems are still completely independent. Any pre-treatment or multi-stage system will follow its layer filters wherever they go. A containerized layer filtration system can even be designed with multiple tanks, allowing one to be cleaned while the others continue to produce high quality water. The possibilities are endless.

Environment

Water Production Common Solutions

Containerized Systems for Water Treatment - Desalination and Ultra Filtration



Water Production Common Solutions



**Containerized Systems for Water-Disinfection Treatment
Chlorinators - simple assembly, no energy required**

APPLICATIONS:

Potable water,

Industrial systems, examples: food production, swimming pools

Environment

WE PROVIDE:

Equipment for Meteorology

Air quality

Noise and Vibration

Natural resources

Oceanography



Environment



Meteorological and Hydrometric Stations

Aplicações:

Agriculture

Environment

Solar monitoring

Airports

Flood control and alarm

Environment

Air quality



Applications:

**Urban Pollution
Particle monitoring in mines
Detection of toxic gases
Industrial gas monitoring**



Environment

Air quality



Noise and vibration measuring equipment

Applications:

Industry
Mines
urbanism
Airports
Occupational health
Quality control of the environment



Applications:

Agriculture
Environment Ecosystems
Flood control and alarm
Control of water quality in water resources

Environment

Natural resources



Oceanography





Mines

WE PROVIDE:

Laboratory equipment

Prospecting

Processing



Mines



Laboratories

Laboratories

Production of rock blades

XRF XRD Analyzers

Microscopy

Granular analysis

Field equipment

Environment

Prospection

Prospection



Prospecting

Gravimetry

Magnetism

Resistivity



Control of water quality in water resources

Mines

Processing



Agriculture

Environment Ecosystems

Flood control and alarm

Control of water quality in water resources

Client Portfolio

1. Ministério de Ciência e Tecnologia, Ensino Superior e Técnico Profissional
2. Ministério da Educação e Desenvolvimento Humano
3. Ministério dos Recursos Minerais e Energia
4. Ministério da Saúde
5. Ministério das Obras Públicas, Habitação e Recursos Hídricos
6. Ministério do Mar, Águas Interiores e Pescas
7. Ministério da Agricultura e Desenvolvimento Rural
8. Ministério do Trabalho, Emprego e Segurança Social
9. Ministério da Defesa Nacional
10. Ministério da Juventude e Desportos

Client Portfolio

1. Universidade Eduardo Mondlane
2. Universidade Pedagógica
3. Universidade Zambeze
4. Universidade Lúrio
5. Universidade Católica de Moçambique
6. Institutos Superior Politécnicos
7. Institutos Industriais e Comerciais
8. Instituto Nacional de Minas
9. Direcção Nacional de Gestão e Recursos Hídricos
10. Fundo de Investimento e Património de Abastecimento de Água
11. Administração de Infraestruturas Águas e Saneamento

Relief Projects

1. Ministério da Ciência e Tecnologia, Ensino Superior Técnico-Profissional

- Laboratories: Mechanics; Electronics and Electricity; Automation; Mechanical Automation; Automation and Controllers; Pneumatics / Hydraulics; Machine Tools, Conventional and CNC; Metallurgy and Welding; Civil Construction, Agricultural Tailors and Carpentry and IT
- PIREP-Various Training Centers

2. Ministério da Educação

- Interactive whiteboards and IT equipment (all over the country)
- 30,000 school desks (all over the country)
- Plataforma de e-lerning

Relief Projects

3. Escola Superior de Ciências Náuticas

- Bridge Simulator

4. Universidade Eduardo Mondlane

- Physics Laboratory
- Marine Sciences and Biodiversity

5. Universidade Politécnica

- Civil engineering laboratory

6. Universidade Pedagógica

- Laboratory Chemistry and Biology

Relief Projects

1. MINISTÉRIO DA SAÚDE

- Containers and Equipment (X-ray for Tuberculosis Screening) at Ressano Garcia Occupational Health Center
- Equipment, Materials and Reagents for National Laboratory of Water Hygiene and Food

2. INSTITUTO NACIONAL DE SAÚDE

- Various Laboratory Equipment

3. UNIVERSIDADE ZAMBEZE – Faculdade de Ciências de Saúde

- Morgue and Autopsy Room Equipment
- Stomatology Equipment

4. UNIVERSIDADE EDUARDO MONDLANE - Faculdade de Medicina

- Equipment for the Physiological Sciences Laboratory

Relief Projects

1. Fundo de Investimento e Património de Abastecimento de Água (CENTRO e NORTE)

Water Meters and Macro Meters

2. Administração de Infraestruturas Águas e Saneamento

Water Equipments

3. Fundo de Investimento e Património de Abastecimento de Água (Sede)

30.000 Water Meters

4. Conselho de Regulação de Águas

Water quality control equipment

5. Instituto Nacional de Minas

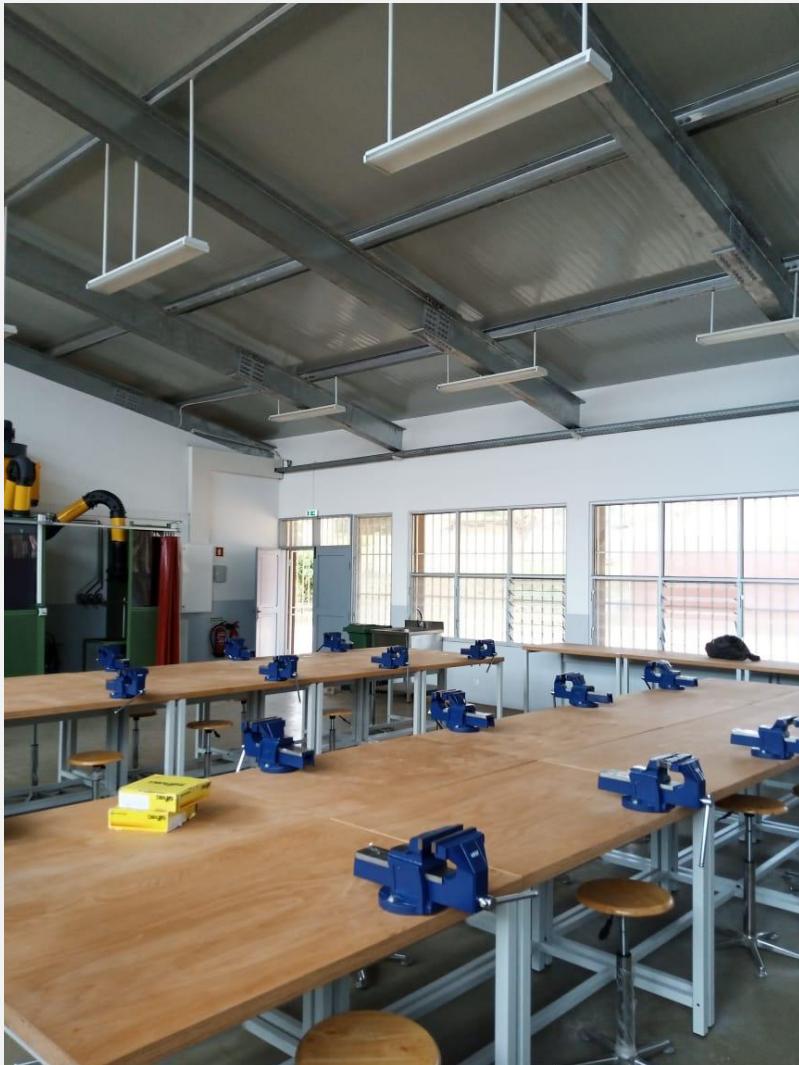
Control Kits for Heavy Metals in Water and Soils

Some examples ...



Research & Teaching

SOLDADURA METALOMECHANICA



Research & Teaching

**WELDING
METALOMECAICA**



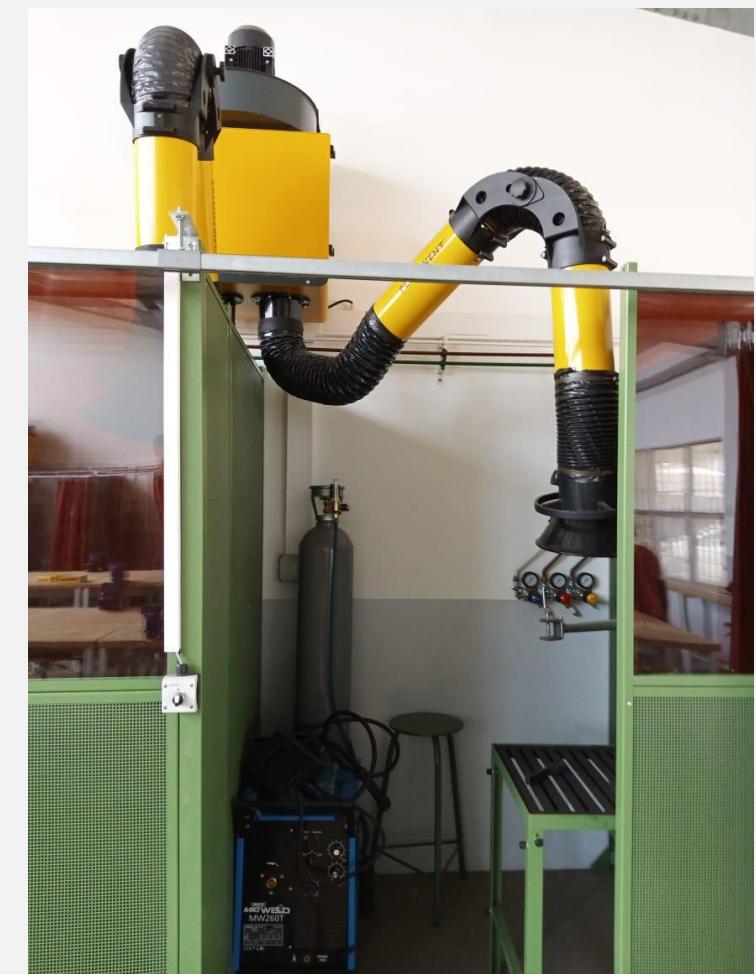
Research & Teaching

WELDING
METALOMECAICA



Research & Teaching

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METALOMECAICA



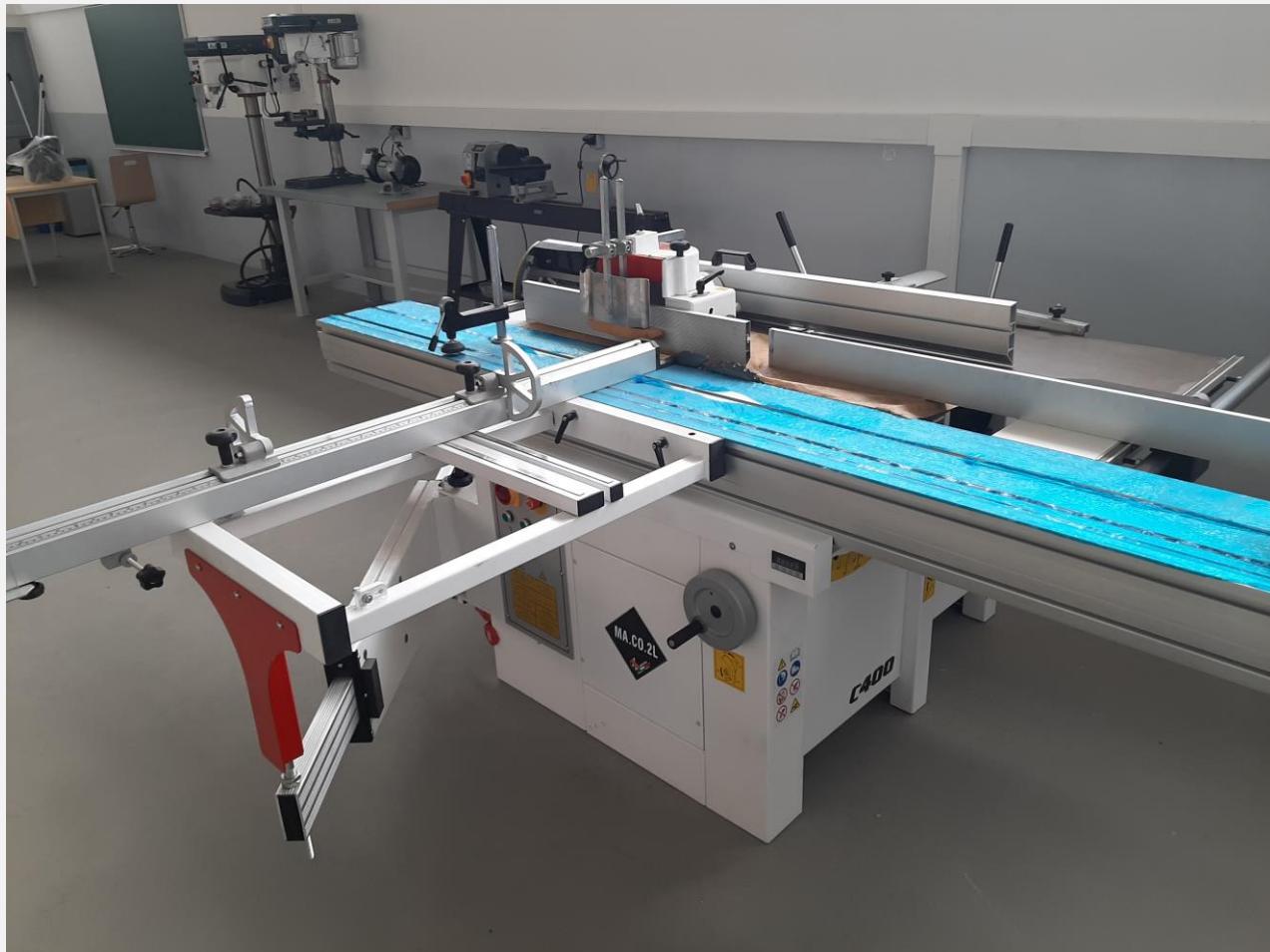
Research & Teaching

CARPENTRY



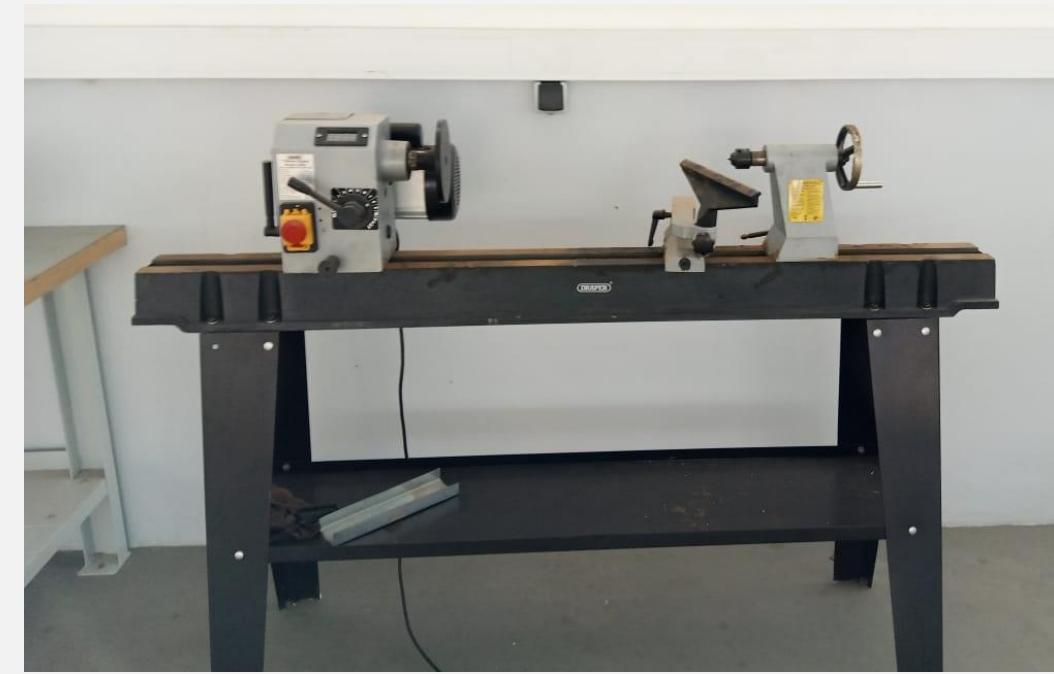
Research & Teaching

CARPENTRY



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AUTOMOBILE TECHNOLOGY



Contactos

Thank You!



Bairro da Costa de Sol, Av. 4. 680 – Major General Candido
Mondlane, Nº 2007
Maputo – Moçambique

Contactos: (+258) 84/ 86 69 74 444 / (+258) 82 06 60 201
Email: geral@tronicamz.com – Web: www.tronicamz.com