REVOLUTIONIZE YOUR WAY OF VIEWING

Dental Industry Awards 2024
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i-NOVO AWARDS
1

FALKO 3D SYSTEM

Tecno Med ITALIA Group

www.tecnomeditalia.com

DIGITALIZATION

BENEFITS OF DIGITALIZATION IN CLINICAL, SURGICAL AND ACADEMIC FIELDS

Digitalization is profoundly transforming the medical sector, reshaping the delivery of care, enhancing operational efficiency, introducing new collaborative methods and enriching the educational experience. Technologies such as Augmented Reality (AR), Mixed Reality (MR) and telementoring are redefining how medical and surgical procedures are planned and executed. Digitalizing is not merely a response to ongoing changes but a proactive strategy to anticipate the future and gain tangible advantages in terms of quality, efficiency and competitiveness. For clinics, hospitals and universities, adopting digitalization represents a decisive step toward a more connected and technologically advanced healthcare system. This investment improves internal organization, reduces errors, strengthens data security and optimizes processes, enhancing both care services and education. It is a strategic choice that elevates the competitiveness of institutions, preparing them to better face the challenges of an ever-evolving medical sector.

BENEFITS IN *CLINICAL AND SURGICAL FIELDS*

The integration of digital technologies, such as augmented reality (AR) and mixed reality (MR) visors, allows doctors to overlay 3D images directly onto the patient or access clinical data within their field of view. In the surgical field, this advancement optimizes the planning and execution of procedures, reducing operating times and enhancing patient safety. In clinical settings, digital technologies improve diagnosis and patient monitoring, providing real-time information that enhances the precision and effectiveness of care. Additionally, digitalization facilitates remote collaboration, enabling specialists to assist doctors and surgeons in real-time during complex procedures or consultations, even from afar. This approach is particularly beneficial in settings with less local expertise, improving procedural outcomes and expanding continuous training opportunities for healthcare personnel.

BENEFITS IN *MEDICAL AND ACADEMIC TRAINING*

The integration of digital technologies into medical education offers students a safe and dynamic learning environment. Immersive simulations and interactive tools reduce the anxiety of early practical experiences, boosting confidence and improving the quality of student preparation. This approach provides an enriched learning experience, preparing future professionals to face clinical challenges with greater competence. Digital technologies also enhance universities' research capabilities by facilitating the rapid analysis of clinical data and ting interdisciplinary and international collaboration. In this way, academic institutions solidify their role as leaders in technological evolution, accelerating innovation in the medical field.

LEAN MORE

JOIN THE DIGITAL REVOLUTION!

FALKO 3D SYSTEM PACKAGE

Digitalize your practice with the exclusive package that includes the FALKO 3D visor, the OKKIO 3D camera, and the revolutionary Head Tracking Mouse. This cutting-edge system, which can also interface with a 3D scanner, implant navigation system, CBCT or patient record software, allows you to step into the new digital era of surgery and medical training. Enhance operational efficiency, improve diagnostic precision, and facilitate remote collaboration.

DON'T MISS THIS OPPORTUNITY: BRING YOUR PRACTICE INTO THE FUTURE OF DIGITAL MEDICINE!

PATENT PENDING

N. 102023000006684
N. 102023000006690

WARRANTY 3 YEARS

INDUSTRY 4.0

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The exclusive package includes:

- **FALKO 3D Wireless Visor**
  REF. FK301DV-D3
- **OKKIO 3D Camera**
  REF. FK900D-3DG25
- **Head Tracking Mouse (HTM)**
  REF. FK801MTR/M
- **OKKIO Articulated arm for Servo mobile**
  REF. OF933BA

Product code: OF312D3
Windows 10 Pro

Product code: OF412D3
macOS High Sierra

FALKO 3D

THE VISOR

LEAN MORE

MD
Medical Device

A GLIMPSE INTO THE FUTURE:

The FALKO 3D visor is specifically designed for medical applications, surpassing the limitations of commercial visors. It facilitates medical training, enhances communication with patients and combines advanced technology with ergonomic design for optimal operational efficiency in maxillofacial, endodontic and prosthetic fields.

KEY FEATURES:

- Compliance with Medical Standards: Adheres to MDR standards, ensuring safety and reliability in medical procedures.
- Ergonomic Design: Provides superior comfort during long surgical procedures with a medical-grade helmet featuring a “flip-up” system and customizable adjustments, reducing visual fatigue and improving posture.
- Integration with Diagnostic Systems: Compatible with a wide range of diagnostic imaging devices, enhancing operational precision while keeping focus on the patient.
- Exclusive Features for Medical Environments: Includes innovative functionalities such as head-controlled cursor management, wireless foot pedal and hands-free interaction.
- •Stability and Safety: Designed to minimize latency and prevent motion sickness, making it ideal for extended operations.
- Support for Collaboration and Training: Optimizes collaboration between surgeons and assistants and supports remote training with instant annotations and sharing, elevating the quality of medical education.

APPLICATION AREAS

Clinical Setting

The FALKO 3D provides direct visualization of diagnostic images, making it easier to explain conditions and procedures to patients. Its compatibility with 2D/3D microscopes, 3D scanners, and cameras enhances diagnostic precision, reduces visual strain and improves the practitioner’s posture.

Surgical Setting

Ideal for computer-assisted surgeries, the FALKO 3D improves surgical precision while minimizing fatigue and disorientation. Its head-controlled cursor management ensures a sterile interaction with both the device in use and when accessing diagnostic documents and radiological images. The zero-latency feature ensures seamless, real-time visualization.

Academic Setting

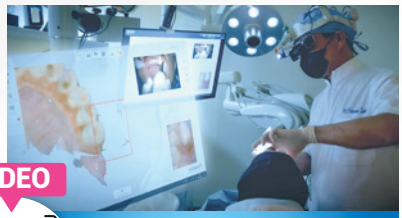
Perfect for advanced medical education, it allows students to observe real-time procedures. Remote collaboration enables experts to provide immediate feedback, enriching the learning experience. The annotation and image-sharing features facilitate understanding of complex procedures, making education accessible from anywhere.

FALKO 3D *WIRELESS*

- **Compatible with all HDMI devices, Windows PCs, Mac and Linux**
- Compatible with all HDMI devices, Windows PCs, Mac and Linux
- Wireless, plug and play
- No software required
- AR-MR technology
- Up to 8 hours of battery life
- Weight: 460g

Product code: FK301DV-D3

CONNECT IT TO ALL YOUR HDMI DEVICES



VIDEO

WATCH THE VIDEO OF PROFESSIONALS **USING IT!**

FALKO 3D *WIRED*

- **Compatible with all HDMI devices, Windows PCs, Mac, and Linux**
- Plug and play
- No software required
- AR-MR technology
- Weight: 360g

Product code: FK301DV-ND3

CONNECT IT TO YOUR 3D MICROSCOPE OR 3D SCANNER

FALKO 3D *WIRED USB-C*

- **Compatible with 3D microscopes, PCs, laptops and most smartphones and tablets with USB-C/ Thunderbolt video output. Ideal for remote assistance or 3D telementoring.**
- Plug and play
- No software required
- AR-MR technology
- Weight: 360g

Product code: FK301DV-CD3

CONNECT IT TO YOUR MOBILE DEVICE

OKKIO
USB - HDMI - 3D

LEAN MORE

SMART MEDICAL CAMERA

The OKKIO camera line, engineered by Tecnomed Italia, offers advanced visualization solutions, ideal for both surgical and educational environments. Available in 2D USB, 2D HDMI, and 3D versions, these cameras provide high-definition imaging with intuitive operation. The OKKIO 3D version integrates seamlessly with the FALKO 3D system, enhancing diagnostic and operational precision, while the 2D models deliver excellent quality and versatility. With easy remote sharing and collaboration, OKKIO stands out from commercial cameras repurposed for clinical use.

PRODUCT CODE FK900D-	2580KLA	2580HD	3DG25
RESOLUTION	4K	4K	FHD
LENS	25 MM - F8.0	25 MM - F8.0	25 MM - F8.0
FOCUS	autofocus - manual 650-750 mm	Manual 300-1000 mm	Fissa 380-420 mm
ZOOM	4X	Fino a 40X	4X
CONNECTION	USB	HDMI	USB
TYPE	2D	2D	3D
MICROPHONE	Sì	No	No

OKKIO 3D

4.0 INDUSTRY

WARRANTY 3 YEARS WARRANTY

REC SOFTWARE

OKKIO 3D

Tecnomed Italia's latest innovation, OKKIO 3D, is a high-definition stereoscopic 3D camera with 4X magnification, designed to revolutionize visualization in clinical, surgical and educational applications. Seamlessly integrated with the FALKO 3D system, OKKIO 3D facilitates remote collaboration and information sharing, effectively addressing the needs of both surgical and educational environments. With its ease of use and compatibility with existing 3D visors, it significantly enhances diagnostic accuracy and operational precision, making it an indispensable tool for clinical practice and advanced medical education.

The LED illuminator, featuring touch control, provides excellent coaxial lighting of the operating field with 32,000 LUX and a color temperature of 5700 K, making it independent of any existing light sources. OKKIO 3D elevates the clinical, surgical and educational experience to new standards, offering future professionals an immersive and technologically advanced learning environment.

Product code: FK900D-3DG25

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OKKIO USB

OKKIO 4K MicroUSB with 4x optical zoom offers excellent image quality thanks to its Sony sensor and fast, precise autofocus (focusing distance between 650 and 750 mm). The direct connection to a PC via USB makes it convenient to use. With 4K resolution and a 25mm lens with an F8.0 aperture, it captures sharp and bright details. It also features a built-in microphone for audio recording. Its compact size and lightweight design allow for use in multiple offices, thanks to the magnetic mount for lamps. It is compatible with Windows, Mac, Linux, and Android.

Product code: FK900D-2580KLA

REC
SOFTWARE

OKKIO HDMI

LED ILLUMINATOR
TOUCH

The OKKIO 4K HDMI medical camera offers excellent documentation and communication quality in the dental and medical field. Equipped with a high-definition Sony sensor, it captures images up to 4K resolution and provides 4X optical zoom and up to 40X digital zoom to capture fine details. Its quick installation on a magnetic articulated arm allows for photos and videos to be recorded from the same viewpoint as the physician. Additional features include a 25mm lens, manual focus, and digital zoom up to 30X at 70 cm and 40X at 40 cm.

Product code: FK900D-2580HDL
WITH ILLUMINATOR

Product code: FK900D-2580HD
WITHOUT ILLUMINATOR

DR. FABIA PROFILI

DEGREE IN DENTAL HYGIENE AND MASTER'S DEGREE IN HEALTH PROFESSIONS TECHNICAL ASSISTANCE SCIENCES.

"Using the OKKIO USB 4K camera has completely transformed the way I communicate with patients. Positioned on the operating lamp, it allows me to capture detailed real-time images of the treatment, making every step visible to the patients as well. They are intrigued and engaged in the process, often asking to review the images or videos on the monitor."

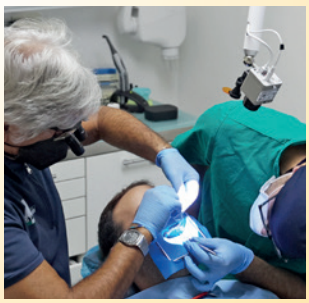
VIDEO

WATCH THE VIDEO OF PROFESSIONALS
USING IT!

PROF. ANGELO PUTIGNANO

PROFESSOR OF RESTORATIVE DENTISTRY AT THE POLYTECHNIC UNIVERSITY OF MARCHE. LUCIANI PUTIGNANO DENTAL OFFICE.

"The 4K image quality of the OKKIO HDMI camera delivers impressive clarity, enabling precise visualization of every detail. Its compact size and ease of use are significant advantages, as the camera doesn't interfere with the operative field, ensuring high-quality video capture, valuable for both surgical procedures and educational purposes."



VIDEO

WATCH THE VIDEO OF PROFESSIONALS
USING IT!

CONNECT EXAMPLE

CONNECT THE OKKIO USB CAMERA TO THE PC DIRECTLY

CONNECT EXAMPLE

CONNECT THE OKKIO HDMI CAMERA DIRECTLY TO THE MONITOR USING A VIDEO RECORDER 4K

ARMS

ARTICULATED ARM FOR CAMERAS

LEAN MORE

EASILY CAPTURE PHOTOS AND VIDEOS

The articulated arm system developed by Tecnomed Italia is designed primarily to position OKKIO cameras or generic cameras, in combination with the FALKOLED illuminator, at a distance of 300-500 mm from the oral cavity, following the same line of sight as the doctor during dental procedures. This flexibility allows for high-quality images and stable video recordings, all without shadows.
In the past, documenting a procedure required an additional operator or pausing the work to resume later. Now, with the OKKIO arm, these tasks can be done independently, without interruptions or obstacles.
The arm's versatility also makes it ideal for use with the FALKO visor, providing a view that enhances eye-hand coordination during the procedure, preventing motion sickness and posture issues. The articulated arm can be configured according to operational needs and the technical characteristics of the workspace. Additionally, thanks to a special adapter, it is also compatible with commercial cameras that have a standard photographic mount and a maximum weight of 500 grams.

SAME ARTICULATED ARM, MANY APPLICATIONS

WALL-MOUNTED

STAND-MOUNTED

CLAMP-MOUNTED

LAMP POLE MOUNTED

TABLE-MOUNTED

HEADREST-MOUNTED

WALL-MOUNTED

With 70 cm extension

Product code: OF933PA

STAND-MOUNTED

Product code: OF933BA

CLAMP-MOUNTED

Product code: OF933MO

LAMP POLE MOUNTED

Choose jaw size: 45-50-60-70-80-90 mm

Product code: BROK01

FALKONNECT

THE MULTIMEDIA STATION

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LEAN MORE

Seamless Switching - FALKONNECT allows you to manage, select and simultaneously share multiple video signals from a wide range of medical imaging devices, such as cameras, X-ray machines, ultrasounds, microscopes, surgical navigators and much more. It facilitates the distribution of these signals to multiple medical displays or online streaming platforms effortlessly.

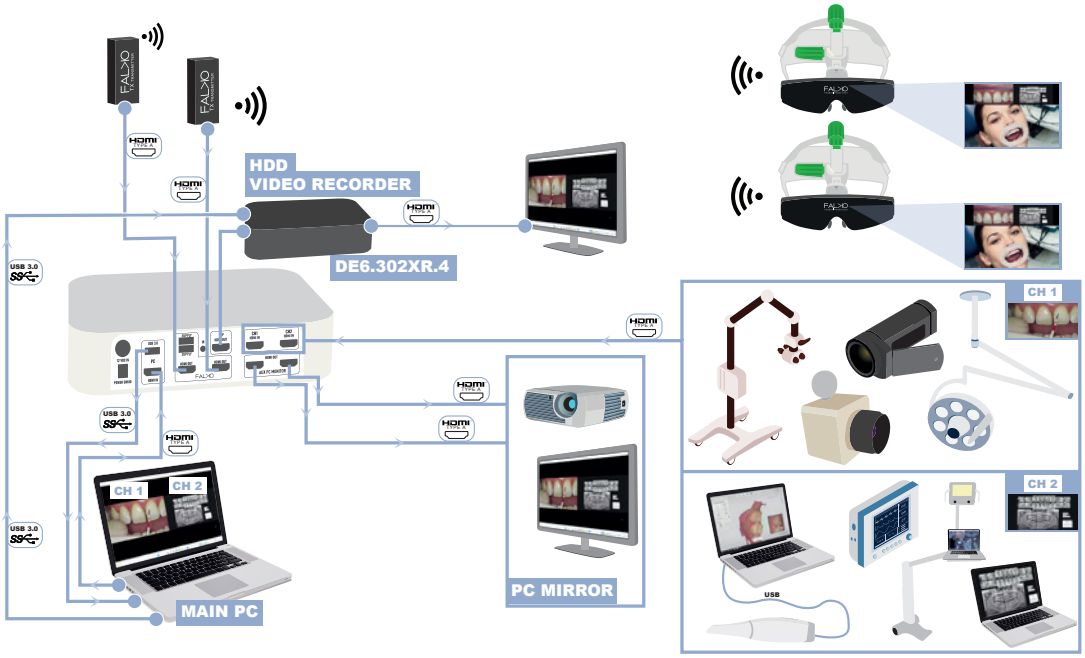
FALKONNECT is a multichannel, multi-window video processor that enables simple yet advanced management of video signals from medical imaging devices and their distribution to medical displays or online streaming platforms. With FALKONNECT, doctors have the flexibility to easily switch between incoming imaging devices and select the desired signal to display (up to four simultaneously) without constantly connecting or disconnecting cables.

Additionally, with the "Multi-view" feature, it's possible to view up to two video windows on the same screen, either in Picture-in-Picture or Side-by-Side mode. By directly connecting FALKONNECT to a digital recorder and then to a Windows or Mac PC, users can take photos, record videos in up to 4K resolution, engage in remote medical telecooperation and conduct educational sessions with a large number of participants.

DR. CLAUDIO FARNARARO
DDS | MSC | ENDODONTIC EXCLUSIVIST

"Until a year ago, I only had my microscope connected to the TV, but now with FALKONNECT, there's a fully functional station that allows me to interact with colleagues, conduct telementoring and provide educational sessions. One particularly interesting feature is the ability to easily switch between two video windows. I can display them simultaneously on the same screen and effortlessly switch between Picture-in-Picture and Side-by-Side modes. The system is extremely intuitive to use and installs easily in the practice, without causing any clutter or interfering with my workflow."

CONFIGURATION EXAMPLE



FALKONNECT

Multichannel and Multi-window Video Processor for Managing Video Signals from Medical Imaging Devices

KEY FEATURES:

- 2 HDMI video inputs from HDMI devices and/or PC
- 1 HDMI output with multi-viewer options (PIP-POP-SBS)
- 1 HDMI input for PC
- 4 HDMI splitter outputs for main PC
- 2 power ports for TX FALKO
- 1 additional HDMI 12V output for OKKIO
- IR Remote Control
- Power supply: 220VAC/24VDC

Product code: FK701DTR

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HDD VIDEO RECORDER

Product code: DE6.302XR.4

4K UHD Digital Video Recorder. Experience true Ultra-HD recording with this 4K UHD digital video recorder specifically designed for medical applications. With a simple HDMI connection, it captures and stores photos and videos at resolutions up to 4K, ensuring that every detail is preserved with maximum clarity.

The removable HDD allows for easy file transfer to any computer system. Ideal for recording photos and videos from medical devices, this recorder supports a variety of resolutions and frame rates to meet your needs. It can be operated using the included remote control or the Esacam Tecnomed remote. Additionally, when connected via USB to a PC, you can view the footage on Windows or Mac camera apps, as well as on Zoom, Meet, Teams and Skype.

HEAD TRACKING MOUSE

MAKE YOUR DENTAL MANAGEMENT SMART

The Head Tracking Mouse revolutionizes the daily management of your dental practice by streamlining data entry into any dental software. This innovative device allows you to control your computer entirely through head movements, a foot pedal and voice commands, eliminating the need for a traditional mouse and keyboard. With voice dictation, you can: write texts, transcribe files into patient records, take real-time notes during appointments and even record clinical conversations.

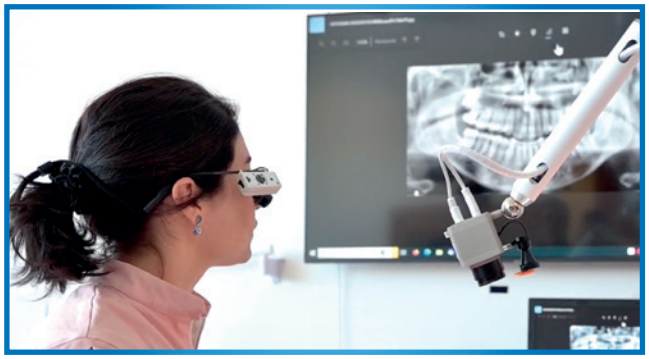
In addition to improving operational efficiency and digitizing processes, the Head Tracking Mouse raises hygiene standards by saving valuable time and resources. This advanced system allows professionals to focus on more valuable tasks, increasing productivity and profitability in the clinic.

WATCH THE VIDEO

No software installation required

Plug-and-play

Simply connect the receiver to your PC's USB port, attach the Head Tracking Mouse transmitter to your helmet, headset, or glasses frame, position the microphone, press the power button and the system is ready to go!



HEAD TRACKING MOUSE

Head Tracking Mouse - Windows
Product code: FK801MTR

Head Tracking Mouse - iOS
Product code: FK801MTRM

WARRANTY 3 YEARS

LEAN MORE

FALKOLED

LIGHT UP YOUR VISION

Tecnomed presents a range of LED illuminators compatible with both FALKO and OKKIO systems. The fixed version for the FALKO wireless helmet, weighing only 6 grams, emits natural light at 5700 K° with a rectangular spot, ensuring a clear field of view with optimal, shadow-free illumination of the work area. A touchpad located on the helmet's headband allows for easy control of on/off functions and light intensity adjustments up to 32,000 lux. The mobile version, equipped with a touchpad, adhesive Velcro, and a universal clip, can be quickly attached to multiple FALKO helmets and, when needed, to glasses or visors, powered by a simple USB power bank.
The range is completed by two additional versions specifically designed for use with the OKKIO camera and any cameras with a standard photographic thread. These circular spotlights provide a clear, shadow-free field of view, ensuring stable and uniform illumination, which is crucial for high-quality photo and video capture. The illuminator operates independently from the camera.

FALKOLED
Application for FALKO Wired

Application for FALKO Wired:
- Can be applied to multiple helmets using a universal clip
- On/off and intensity control with adhesive touchpad
- Square spotlight: 32,000 LUX, 5700 K°
- Powered by USB

Product code: IL903F

FALKOLED
Application for FALKO Wireless

Application for FALKO Wireless FK-301DV-D3:
- On/off and intensity control with a touchpad
- Circular spotlight: 24,000 LUX, 5700 K°
- Powered by FALKO

Product code: IL904FW

FALKOLED
Universal Application for Cameras

Universal Application for Cameras:
- Standard 1/4-20 UNC photographic thread support
- On/off and intensity control with adhesive touchpad
- Circular spotlight: 24,000 LUX, 5700 K°
- Powered by USB 5VDC

Product code: IL902HU

FALKOLED
Application for OKKIO HDM

Application for OKKIO HDMI Cameras:
- Powered by 12 VDC
- On/off and intensity control with detachable touchpad
- Square spotlight: 32,000 LUX, 5700 K°
- 12 VDC power supply

Product code: IL901H

SIMU3D

MEDICAL EDUCATION

NEXT-GENERATION MULTIMEDIA DENTAL SIMULATORS FOR EDUCATION AND HANDS-ON TRAINING IN DENTISTRY AND ORAL HYGIENE

Mounted on a dedicated articulated arm, the Tecnomed Italia 3D camera with 4X optical zoom offers a significant advantage by capturing and transmitting the same "point of view" in real-time during teacher-student interactions. The precise reproduction on the "patient simulator" enables more effective teaching and provides a hands-on, immediate learning experience. Another key feature that enhances both teaching and learning is the ability for instructors to share stereoscopic 3D footage directly to students' smartphones. Equipped with commercial VR headsets, students can actively participate, even from remote locations around the world. Training with the 3D simulator delivers a unique experience and substantially reduces the learning curve.

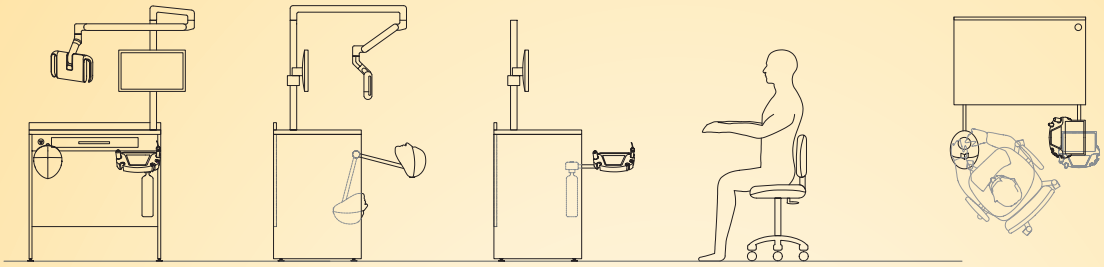
Each student station can also be equipped with a 2D camera, allowing them to view both the instructor's simulation and their own practice side-by-side on the monitor in real-time. By connecting their smartphones, students can record and compare their practice sessions with the instructor's, share them with peers, and comfortably review their work after class.

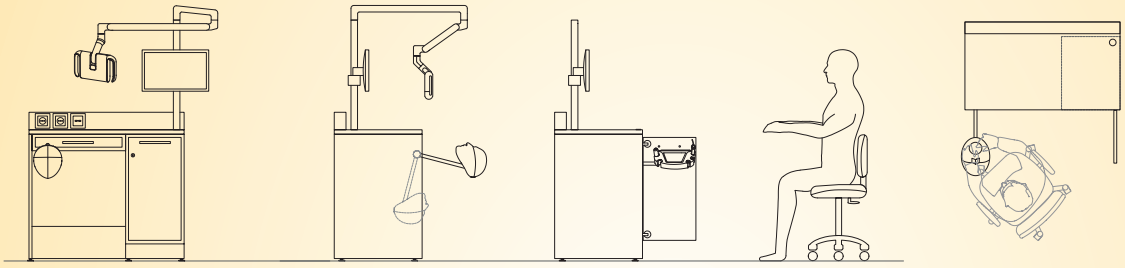
To accommodate specific needs, Tecnomed Italia can custom-design classrooms both ergonomically and multimedia-wise, ensuring high-quality service and state-of-the-art technological support.

SIMU3D is Tecnomed Italia's latest generation of multimedia simulators, designed for advanced training and education in dentistry and implantology.
These solutions are tailored to meet the demands of modern dental education, preparing students for hands-on "chairside" work in a digital practice.
Each training station is equipped with multimedia devices, including a medical monitor, audio-video connectivity for instructors, and a 40,000-lux LED operating light. Ergonomically arranged, the station also includes traditional instruments such as a mannequin, air-water syringe, two dynamic instrument modules for handpieces and two suction terminals. Optional add-ons, such as a scaler and curing light, are also available.

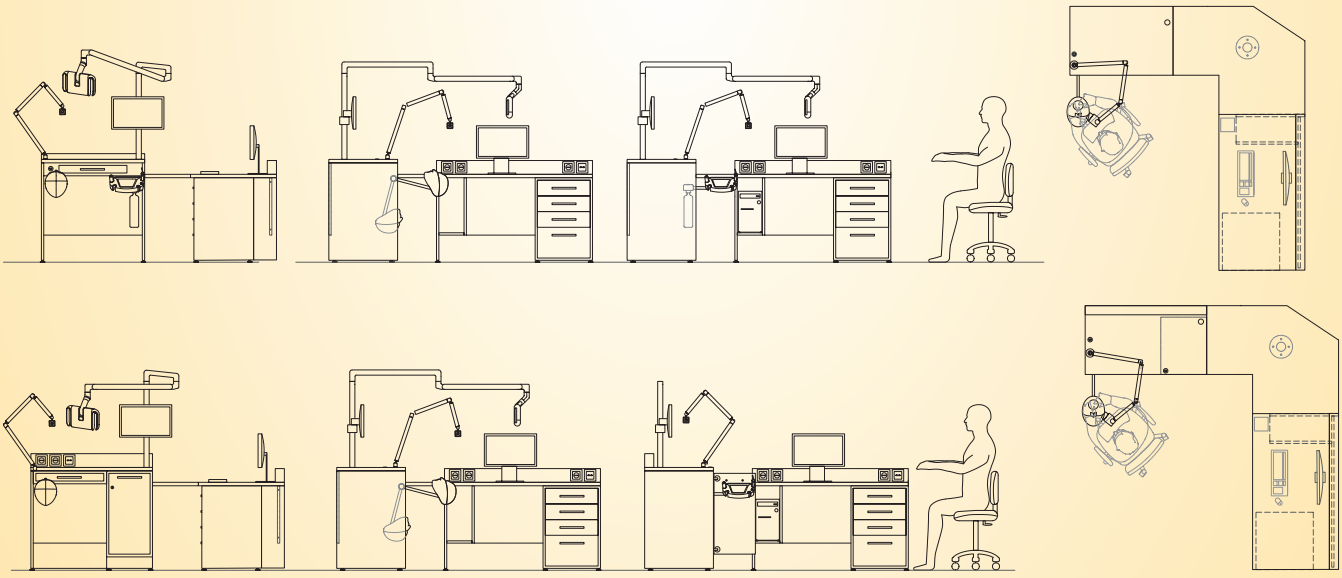
ACCESSORIES

EXAMPLES OF STUDENT PANEL





EXAMPLES OF TEACHING/ SPEAKER PANEL



CONTACT US FOR A EDUCATIONAL PROJECT

CONTACT

SCAN ME

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