C-MAC® for Neonatology and Pediatrics
The Premium Class for pediatric airway management
When you are looking for solutions that fit...

Children are not small adults. Anatomical and physiological differences between infants, children and adults make even the normal pediatric airway difficult for the inexperienced intubator. So adequate experience as well as the right instrument is needed for airway management in the pediatric population.

The new C-MAC® Premium line from KARL STORZ, one of the leading companies in the field of airway management, provides a custom-fit solution that meets the most stringent demands in pediatrics and neonatology. The continuous expansion of the product portfolio and the realization of a universal C-MAC® system interface supports the system approach of the new Premium line. In the field of pediatrics, this also leads to a fully flexible intubation platform for anesthesiology and emergency medicine in the clinical setting.

No matter if it is a routine, anticipated difficult, or unanticipated difficult intubation – the intubation instruments from KARL STORZ offer the right solution to the daily challenges encountered in airway management. Five different blades are now available for video laryngoscopy in pediatrics and neonatology: MILLER 0 and 1, MACINTOSH 0 and 2 as well as the D-BLADE Ped. The latter was especially designed for managing difficult airways in children and closes the gap between MACINTOSH video laryngoscopes and flexible endoscopes.

The C-MAC® monitor, which allows the simultaneous connection of several endoscopes at the same time, offers the possibility to plan and execute intubation with a single system.
The C-MAC® Monitor: The Heart of the C-MAC® System

- System open to all C-MAC® components (forward and backward compatibility)
- 7” TFT wide viewing angle (160°) with enhanced image quality
- Rapid toggling between video sources possible -> “plan B” is already connected
- HDMI output for connecting an external monitor
- Documentation and display of images and videos in real time
- Easy data backup to USB flash drive for quality control
- System can be used while charging
Heart of the C-MAC® System
The C-MAC® Pocket Monitor: The Emerge

- 3.5” OTI® (Open To Intubate) display with wide viewing angle (160°)
- High-contrast image even in bright daylight
- Universal C-MAC® system interface, tailored to your airway management
- Real-time documentation for quality assurance
- Exchangeable, rechargeable battery – always ready for use
- Completely watertight (IPX8)
- C-MAC® PM connecting cable allows optimal visualization coupled with a well-balanced C-MAC® video laryngoscope

C-MAC® Video Laryngoscopes
- Standard MACINTOSH and MILLER video laryngoscopes for the safe intubation of infants and children
- D-BLADE Ped. with strong curvature for the particularly difficult airway

C-MAC® S Video Laryngoscopes
- Single-use video laryngoscopes for optimal protection against cross-contamination
The C-MAC® Pocket Monitor: The Emergency Tool for Time-critical Situations

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**OTI® (Open To Intubate) Display**
- The video laryngoscopes are ready for immediate use after starting the monitor

**Real-time Documentation for Quality Assurance**
- BlueButton enables images and videos to be recorded to internal memory and retrieved via the USB data cable

**Intelligent Battery Management**
- Uninterrupted readiness at no extra cost thanks to exchangeable and rechargeable battery

**C-MAC® PM Connecting Cable**
- The C-MAC® PM connecting cable enables flexible positioning of the monitor for difficult-to-access patients
The C-MAC® Video Laryngoscope for Pediatrics

Large selection for small patients

- Robust and light: High stability and shock resistance; light alloy design
- Particularly flat model, especially suited for pediatrics and neonatology
- Straightforward plug & play thanks to universal C-MAC® system interface
- BlueButton: Documentation via innovative multifunctional button
- Reprocessing up to 93 °C
- Ergonomic handle designed to meet requirements in pediatrics
- For routine clinical use and training

C-MAC® MACINTOSH #2 and #0

C-MAC® MILLER #1 and #0

Low blade height: 11.5 mm

Shorter distance between the camera and the distal tip: 19.5 mm

C-MAC® D-BLADE Ped.
The C-MAC® S Pediatric IMAGER

The ideal solution with single-use video laryngoscope blades

The pediatric single-use video laryngoscope blades form a perfect symbiosis with the C-MAC® S Pediatric IMAGER and oriented towards the highest hygiene standards.

- Blade and handle form one continuous piece: Risk of cross-contamination is drastically reduced
- Exchange of C-MAC® S video laryngoscopes within seconds
- BlueButton: Documentation via innovative multifunctional button
- Straightforward Plug & Play thanks to universal C-MAC® system interface
- Break-resistant C-MAC® S video laryngoscopes
- Ergonomic handle designed to meet requirements in pediatrics
- For direct and indirect laryngoscopy with MILLER blades
The FIVE 3.0 for the Unexpected Difficult Airway
Fine, fast, focused – the new visualization in flexible intubation

With the 3.0 x 51.5 and 4.0 x 65 Flexible Intubation Video Endoscopes (FIVE), KARL STORZ once again sets a new direction in airway management. Similar to the C-MAC® video laryngoscopes, the FIVEs deliver clear, pixel-free images without a Moiré effect.

The new FIVE 3.0 has a shortened working length, which was specially adapted to the anatomy of pediatric and neonatal patients and the absence of a working channel makes instrument cleaning extremely easy and fast.

- Compatible with the C-MAC® monitor and the C-HUB® camera control unit
- Compact design and ergonomic handle shape
- High image resolution and video imaging in 4:3 format
- Integrated LED light source
- Greater sheath stiffness for controlled handling
Accessories: Little things that make work easier

We do not stop working when our products are finished – because we want to make life easier for you...

How are flexible fiberscopes and rigid eyepiece endoscopes connected to the monitor? **With C-CAM®.**

And how are instruments stored?

**In addition to the unobtrusive C-MAC® protective cover and the well-organized C-MAC® PM bag...**

...we can also offer mobile airway management solutions.
Instruments

8403Z XK  C-MAC® Monitor for CMOS Endoscopes, screen size 7” with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capture in real time on SD card, playback of recorded video clips and still images, data transfer from SD card to USB flash drive possible, splash-proof according to IP54, suitable for wipe disinfection, shock-resistant ABS plastic housing, intelligent power management with rechargeable Li-Ion batteries, VESA 75 mounting option, power adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, for use with CMOS video endoscopes including:

- Protection Cap
- VESA 75 Quick Clip
- Mains Adaptor Set

8403X  C-MAC® Connecting Cable, with C-MAC® system interface, for C-MAC® Monitor 8403Z XK or C-HUB® II 20290301, length 200 cm, for use with C-MAC® Video Laryngoscopes 8403 xxx

8403XDK  C-MAC® POCKET MONITOR Set, unit with LCD monitor and power supply for all C-MAC® video laryngoscopes, with C-MAC® system interface, screen size 3.5”, documentation of images and video sequences saved on internal memory, monitor movable via two rotation axes, rechargeable Li-Ion battery, 1 h operation time, exchangeable battery pack, 2 h charging time, power management with capacity indicator, protection class IPX8, for use with C-MAC® Video Laryngoscopes 8403 xxx including:

- Battery, rechargeable
- USB Data Cable

8403XDP  C-MAC® PM Connecting Cable, for the transmission of digital signals from C-MAC® PM 8403XD to C-MAC® Video Laryngoscopes 8403 xxx (C-MAC® system interface), length 50 cm
For ceps, for children, modified, length 20 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 1 and 2

C-CAM® Camera Head, 8-pin, one-chip CMOS camera head, resolution 640 x 480, focal length f = 20 mm, for use with C-HUB® 20290101 and C-HUB® II 20290301 as well as C-MAC® Monitors 8402ZX/8403ZX

MAGILL Forceps, for children, modified, length 20 cm, suitable for endoscopic foreign body removal, for use with video laryngoscopes sizes 1 and 2

Flexible Intubation Video Endoscope Set 3.0 x 51.5, CMOS technology, for use with C-MAC® Monitor 8403ZX and C-HUB® II 20290301,
- Deflection up/down: 140°/140°
- Direction of view: 0°
- Angle of view: 100°
- Working length: 51.5 cm
- Total length: 72 cm
- Distal tip outer diameter: 3 mm

Flexible Intubation Video Endoscope Set 4.0 x 65, CMOS technology, with suction valve, for use with C-MAC® Monitor 8403ZX and C-HUB® II 20290301,
- Deflection up/down: 140°/140°
- Direction of view: 0°
- Angle of view: 100°
- Working length: 65 cm
- Total length: 93 cm
- Distal tip outer diameter: 4 mm
**C-MAC® Video Laryngoscope MIL #0,**
CMOS technology, with MILLER laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403XD

**C-MAC® Video Laryngoscope MIL #1,**
CMOS technology, with MILLER laryngoscope blade, size 1, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403XD

**C-MAC® Video Laryngoscope MAC #0,**
CMOS technology, with MACINTOSH laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403XD

**C-MAC® Video Laryngoscope MAC #2,**
CMOS technology, with MACINTOSH laryngoscope blade, size 2, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403XD

**C-MAC® Pediatric Video Laryngoscope D-BLADE,**
CMOS technology, for difficult intubation in children, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403X for C-MAC® Monitor 8403ZXK or C-HUB® II 20290301 as well as C-MAC® PM 8403XD
8403XSPK  **C-MAC® S Pediatric IMAGER, Set**, with C-MAC® system interface, for manual and mechanical disinfection up to 65 °C and High Level Disinfection (HLD) acc. to US standards, including Pressure Compensation Cap 11025E and Leakage Tester 13242XL, for use with C-MAC®, Connecting Cable 8403X, C-MAC® Monitor 8403ZX, C-MAC® POCKET MONITOR 8403XD or C-HUB® II 20290301 and single-use C-MAC® S Video Laryngoscopes 051110-10, 051111-10

051110-10*  **C-MAC® S Video Laryngoscope MIL #0**, for single use, package of 10, for use with KARL STORZ C-MAC® S Pediatric IMAGER 8403XSP

051111-10*  **C-MAC® S Video Laryngoscope MIL #1**, for single use, package of 10, for use with KARL STORZ C-MAC® S Pediatric IMAGER 8403XSP

8403YD  **Protective Bag, blue, for the C-MAC® system**, made of water-resistant and sturdy material, washable, separate compartments for the monitor and three C-MAC® video laryngoscope blades with electronic module, for use with C-MAC® Monitor 8401ZX/8402ZX/8403ZX, Electronic Module 8401X/8402X, power supply and 3x C-MAC® video laryngoscopes

8403YE  **Bag for Intubation Set -C22-, ULM model**, made of water-resistant and sturdy material, washable, separate compartments for C-MAC® video laryngoscopes with C-MAC® POCKET MONITOR and for conventional laryngoscopes, for use with C-MAC® POCKET MONITOR 8401XDK/8403XDK, C-MAC® Video Laryngoscopes 8401xxx/8403xxx and conventional laryngoscopes
UG120  **Equipment Cart**, narrow, tall, rides on 4 antistatic dual wheels equipped with locking brakes, mains switch on cover, central beam with integrated electrical subdistributors with 12 sockets, grounding plugs, Dimensions in mm (w x h x d):
Equipment Cart: 660 x 1474 x 730,
Shelf: 450 x 25 x 510, caster diameter: 150 mm, including:
  * Base Module, equipment cart, narrow
  * Cover, equipment cart, narrow
  * Beam Package, equipment cart, large
  * 3x Shelf, narrow
  * Drawer Unit with Lock, narrow
  * 2x Equipment Rail, long
  * Camera Holder
  * 5x Mains Cords, length 100 cm

UG110  **Equipment Cart**, narrow, small, rides on 4 antistatic dual wheels equipped with locking brakes, mains switch on cover, energy beam with integrated electrical subdistributors with 6 sockets, grounding plugs, Dimensions in mm (w x h x d):
Equipment Cart: 660 x 1265 x 730,
Shelf: 450 x 25 x 510, caster diameter: 150 mm, including:
  * Base Module, equipment cart, narrow
  * Cover, equipment cart, narrow
  * Beam Package, equipment cart, small
  * 2x Shelf, narrow
  * Drawer Unit with Lock, narrow
  * 2x Equipment Rail, long
  * 5x Mains Cords, length 100 cm

8401YB  **Clamp**, VESA 75 standard, for fixation of C-MAC® monitor to round profile with diameter 20-43 mm and square profile with diameter 16-27 mm, for use with Monitors 8401ZX/8402ZX/8403ZX

8401YAB  **Crossbar**, for Stand 8401YA, 70 cm x diameter 25 mm, for positioning C-MAC® Monitors 8401ZX, 8402ZX and 8403ZX, for use with VESA 75 Quick Clip 8401YCA and Clamp 8401YB

UG630  **Bracket**, for mounting standard bars (diameter 25 mm) to equipment rails, package of 2

UG623  **Multifunctional Holder**, 2-part, for mounting poles, diameter 25 mm, package of 2, for use with Equipment Carts UGxxx
8401YA*  **Stand**, for C-MAC® monitor, height 120 cm, rollable with five feet and antistatic castors, crossbar 25 cm x diameter 25 mm for positioning the monitor, with tray, dimensions (w x d x h): 30 x 20 x 10 cm, for use with Crossbar 8401YAA and Crossbar 8401YAB

* The displayed instruments are not included with the stand.

8401YH  **Holder for C-MAC®**, consisting of two parts: 1 holder for five C-MAC® video laryngoscope blades and 1 holder for one electronic module, made of thermoplastic material, wipe disinfection, to be fixed to a tray

11301BC  **ProShield Protective Tube**, for flexible telescopes, unsterile, for single use, package of 10, distal closed, for use with Holder for Flexible Endoscopes 29005IFH

29005IFH  **Holder for Flexible Endoscopes**, for mounting to standard tubes, incl. installation accessories
TROLL-E Airway Mobile Stand, rides on 4 antistatic dual wheels, 2 equipped with locking brakes, for mounting monitors with VESA 75/100 connection, integrated cable conduit in vertical beam and cable manager, load capacity for monitor: max. 15 kg,
Dimensions:
Mobile stand: 670 x 1660 x 670 mm (w x h x d),
Caster diameter: 100 mm
Trolley is delivered unassembled.
including:
Subrack, for mobile stand
Beam Module, with tube
Drawer
Equipment Rail
Cross Tube Adaptor
Stainless Steel Round Pipe, length 25 cm

C-MAC® TROLL-E Mobile Stand, rides on 4 antistatic dual wheels, 2 equipped with locking brakes, with stainless steel tube,
Dimensions:
Mobile stand: 670 x 1500 x 670 mm (w x h x d),
Caster diameter: 100 mm
Trolley is delivered unassembled.
including:
Subrack, for mobile stand
Top Cover, with guide sleeve
Stainless Steel Tube, length 135 cm
Equipment Rail
Cross Tube Adaptor
Stainless Steel Round Pipe, length 25 cm
It is recommended to check the suitability of the product for the intended procedure prior to use.
Shaping the Future of Endoscopy with you