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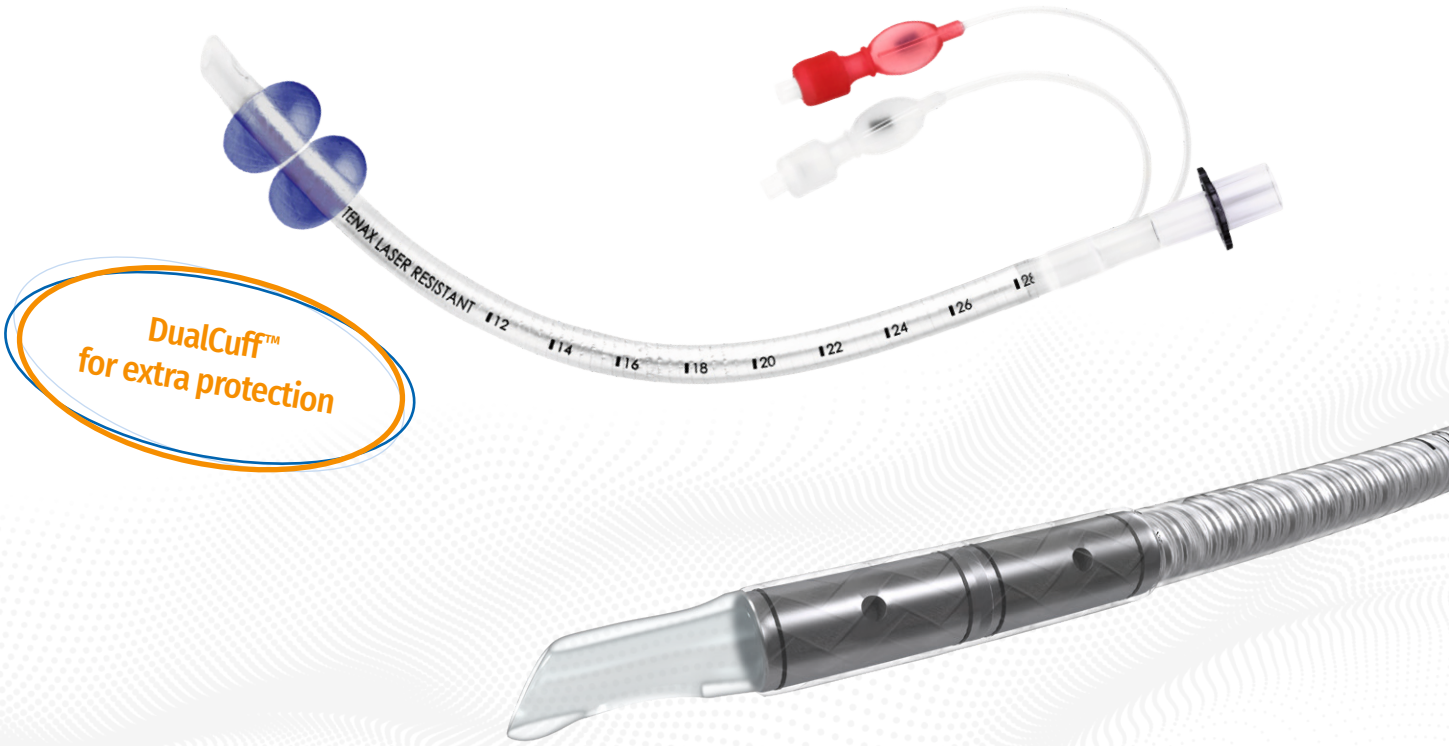
Tenax®

Laser Resistant Endotracheal Tube



Tenax®

Shaping the future of ENT care
smarter, safer and beyond limits

Risk of surgical fires in laser laryngeal surgeries

Three essential components are needed to initiate and sustain a fire during medical procedures in a patient's airway: oxygen + CO2 laser + endotracheal tube.

Of the recorded surgical fires in otolaryngology,
- 36 % occurred during Tracheotomy and
- 25 % under endoscopic laryngotracheal procedures.[1]

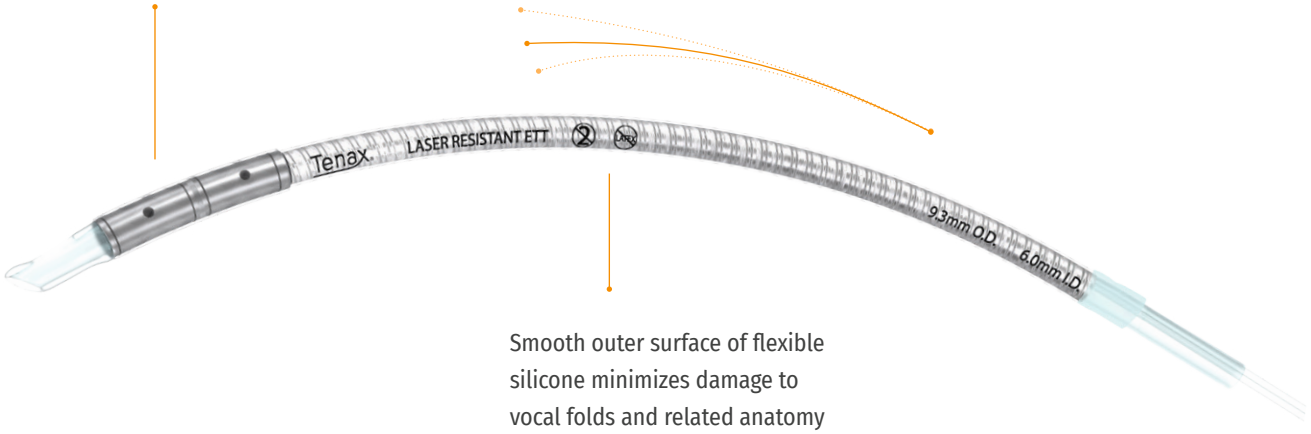
Complications of airway fires can be severe, from required unexpected mechanical ventilation to death in the worst case.

Enhance protection against airway fires and maximize patient safety with Tenax® Laser Resistant Endotracheal Tube.

The Tenax® laser resistant endotracheal tube has an aluminum wrapped, reinforced spiral shaft to prevent airway fire. Latex-free, Tenax® is encased in a smooth sheath of flexible silicone, minimizing damage to vocal folds and related anatomy.

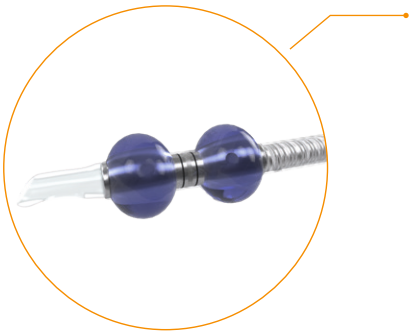
Deflated cuffs are tight to the shaft ensuring a slim profile

Preformed, flexible tube conforms to the trachea



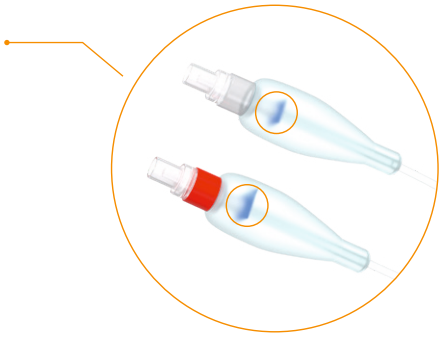
Smooth outer surface of flexible silicone minimizes damage to vocal folds and related anatomy

The Tenax® DualCuff™ offers an extra layer of protection and is preloaded with a biocompatible blue dye.



Tenax® DualCuff™ for early cuff compromise detection
The Tenax® DualCuff™ adds protection against airway fires during laser surgery procedures by providing two sealing points and reducing the chance that the cuff or tube will be compromised by stray laser energy.

The blue dye alerts the surgeon when a cuff is inadvertently violated.



Over 92 %[2] of surgeons rated Tenax® as excellent in helping to reduce the risk of airway fires during the procedure.

Tenax® was created by clinical experts to reduce trauma to the airway

Addressing the preferences for Physical Attributes of Laser-Protected Endotracheal Tubes[4], Tenax® **reduces the risk of tissue trauma** during intubation, intraoperative use, and extubation. 98% of surgeons[2] rated the softness and flexibility of Tenax® as **excellent or good** in minimizing inadvertent tissue trauma, and 98% of surgeons[2] value the **smooth surface of the tube**.

Over 98%[3] of surgeons would recommend their peers to use Tenax® under laser surgery.

Art.-No.	Inner Diameter (mm)	Outer Diameter (mm)	Length (cm)
TN-0050-SET	5.0	7.9	34
TN-0055-SET	5.5	8.6	34
TN-0060-SET	6.0	9.3	34
TN-0065-SET	6.5	10.0	34

Each Tenax® laser resistant endotracheal tube comes with a stylet.

Indicated for use for all types of surgical procedures involving carbon dioxide laser (10.60 µm), KTP laser (532 nm) or Blue Laser (445 nm) use (normal pulsed or continuous beam delivery in the non-contact mode), when endotracheal intubation is required to administer anesthetic gases or to overcome emergency obstruction of an airway.

1. Day, A. T., Rivera, E., Farlow, J. L., Gourin, C. G., & Nussenbaum, B. (2018). Surgical fires in otolaryngology: a systematic and narrative review. Otolaryngology–Head and Neck Surgery, 158(4), 598-616.
2. User observation 2025/retrospective data analysis in the US market. Rating: 1 – Unacceptable; 5 – Excellent[DK7.1]
3. User observation 2025/retrospective data analysis in the US market. Rating: 1 – Unlikely; 10 – Very likely
4. Friedman, A. D., Gerber, M. E., Bhayani, M. K., Kuchta, K., Kumar, K., Ma, A., ... & Zhang, L. Q. (2018). Ideal characteristics of a laser-protected endotracheal tube: ABEA and AHNS member survey and biomechanical testing. Annals of Otology, Rhinology & Laryngology, 127(4), 258-265.

SPIGGLE & THEIS
Medizintechnik

Burghof 14 · 51491 Overath · Germany
Phone: +49 2206 90 81 - 0
Fax: +49 2206 90 81 - 13
info@spiggle-theis.com
www.spiggle-theis.com

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