RUSCH

We see things from your perspective

Rüsch Single-Use Laryngoscope Portfolio



With its rich heritage of research and innovation, Teleflex is dedicated to advancing anaesthesia practice through the continuous improvement of airway management technology.



year history of producing German-quality anaesthesia and respiratory medical devices

427 patents held for airway devices





Every 3 seconds an LMA Airway is used somewhere in the world*

1000







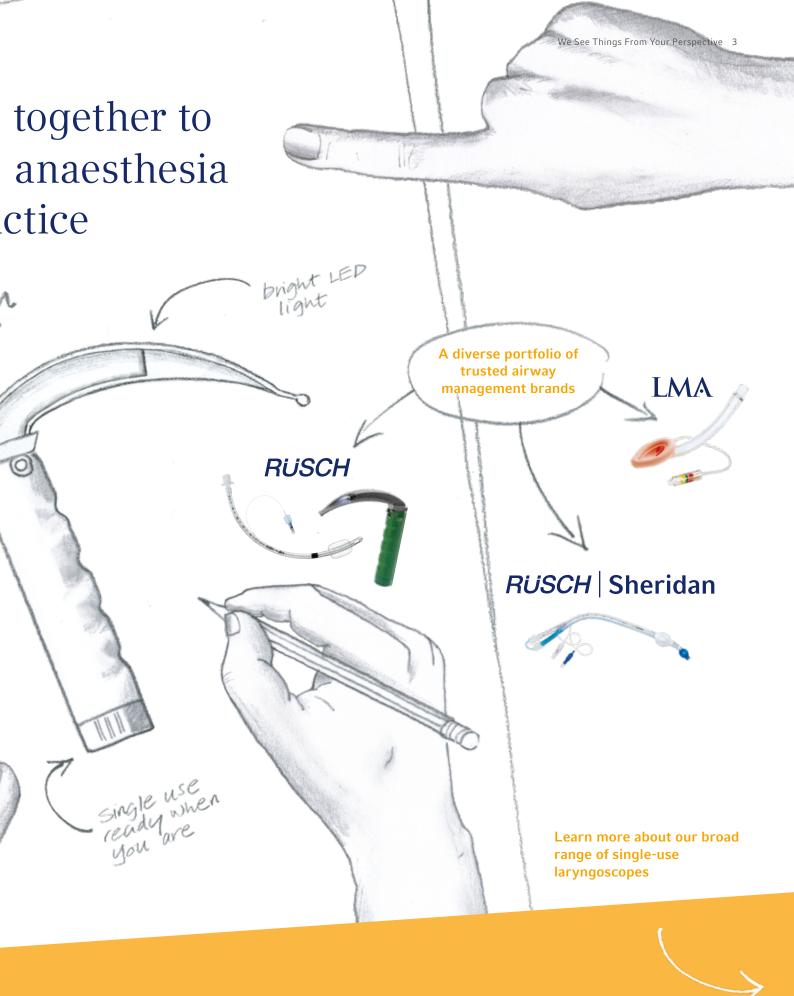
> 12,000 clinicians trained in Teleflex procedural labs every year







* Data on file
** Teleflex Global Anesthesia sales data, YOY, Dec. 2017



Reliable visualisation is critical for successful intubation

Reliable visualisation of the vocal cords is a critical requirement for successful intubation. Laryngoscopes with poor light intensity have the potential to negatively impact vocal cord visualisation; therefore, the International Organisation for Standardisation (ISO) recommends a minimum light intensity of 500 lux for intubation (ISO 7376:2009).²

Research shows the light intensity from many reusable laryngoscope blades is substandard, and may be associated with more poor grade laryngeal views and more failed first intubation attempts compared with single-use blades.^{3,4} Repeated reprocessing of reusable fibre-optic laryngoscope blades is a contributory factor to poor illumination, with research showing that light intensity can degrade by 34-50% over time.^{5,6} ~ 1/3 of reusable laryngoscopes tested in clinical studies exhibited substandard illuminance^{7.9}

34-50%

degradation in light intensity occurs over time due to repeated reprocessing of reusable fibre-optic laryngoscope blades^{5,6}

2.5 A 2.5-fold greater mean light intensity can be achieved with LED light sources versus incandescent bulbs⁷

Bright light when you need it most

Not all light is equal

The Rüsch Single-Use Laryngoscope portfolio features the latest advances in laryngoscope blade illumination technology, designed to provide reliable visualisation when you need it most.

LED

Blue-white LED light source

Rüsch Conventional Single-Use Laryngoscope Blades and Rüsch Fibre-Optic Single-Use Handles incorporate a bright blue-white, integrated LED light source, which provides uniform light to minimise shadowing and aid tissue differentiation. Laryngoscopes with LED light sources frequently outperform laryngoscopes with incandescent bulbs, with up to a 2.5 times greater mean illuminance.⁷



Light source integrated at the blade tip

The LED-in-blade design of Rüsch Conventional Single-Use Laryngoscope Blades is the latest innovation in laryngoscope blade illumination, providing blue-white, LED illumination that is close to source for a high-quality laryngeal view, but remains cool as compared to incandescent bulbs.



Focused fibre-optic light transmission

Rüsch Fibre-Optic Single-Use Laryngoscope Blades deliver focused fibre-optic light transmission to minimise light scatter and aid visualisation.

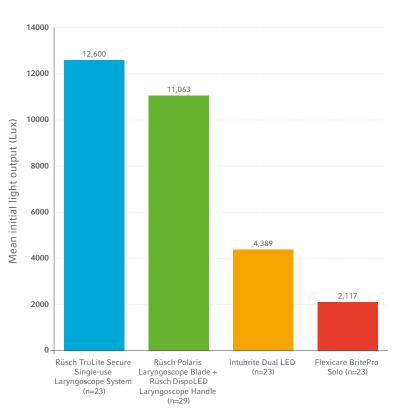
Rüsch Single-Use Laryngoscopes: tried and trusted

Results of benchtop assessment of mean initial light output of leading manufacturers' single-use laryngoscope systems (Figure 1):¹⁰

- Rüsch TruLite Secure Laryngoscope Blade and Handle and Rüsch Polaris Single-Use Laryngoscope Blade + Rüsch DispoLED Laryngoscope Handle offer superior mean initial light output
- ~5-6 times brighter compared to the FlexiCare BritePro Solo
- ~8-9 times brighter compared to Dahlhausen Single-Use blade and handle

Illuminance was evaluated in Mac 3 blades and handles using a light-proof container, laryngoscope positioning system, and spectrometer.

Figure 1. Mean Initial Light Output of Single-Use Laryngoscope Systems



A changing perspective on single use

Currently, the markets shift towards a greater use of disposable devices. Single-use laryngoscope blades present several advantages over reusable blades, namely;

- a reduced risk of cross-contamination⁴
- a reduction in reprocessing costs⁴
- evidence of improved performance⁴

The Rüsch Single-Use Laryngoscope portfolio has been designed with this in mind, and offers a broad range of standard and fibre- optic blades and handles to meet diverse clinician requirements.

Reasons to Use Rüsch Single-Use Laryngoscopes

Concerns over inadequate reprocessing

Sub-optimal cleaning, disinfection, sterilization, and handling of reusable laryngoscope blades are factors associated with a potential risk of cross-contamination. Studies of reusable blades and handles considered ready for patient use have shown that:

up to 869/0 of handles are contaminated with blood or micro-organisms despite low-level disinfection¹³⁻¹⁵

779/0 of blades test positive for occult blood or residual proteins^{14,16}

up to

93% of blades exhibit microbial contamination^{17,18}

up to

Packaging

Transportation

Joint Commission recommendation:19

"Equipment used for intubation, such as laryngoscope blades, should be properly cleaned using the process for disinfection and sterilisation of semi-critical items as designated by the Centers for Disease Control and Prevention (CDC) as "high-level" disinfection."

> The Rüsch Polaris Laryngoscope Blade and Rüsch TruLite Secure Laryngoscope help reduce the potential for cross-contamination associated with reusable devices.

а



- respiratory equipment laryngoscopes for tracheal intubation. Geneva, 12. Twigg SJ, McCormick B, Cook TM. Br J Anaesth. 2003;90(1):8–13. Switzerland: ISO 7376:2009.
- 3. Howes BW. Anaesthesia. 2006;61(5):488-491.
- Amour J, Le Manach YL, Borel M, et al. Anesthesiology. 4. 2010;112(2):325-332.
- Nishiyama T. Anesth Analg. 2007;104(4):908-910. 5.
- Bucx MJ, De Gast HM, Veldhuis J, et al. Anaesthesia. 2003;58(5): 6. 461-465
- Murphy MK, Volsky PG, Darrow DH. Otolaryngol Head Neck Surg. 7. 2015;153(5):806-811.
- Volsky PG, Murphy MK, Darrow DH. JAMA Otolaryngol Head Neck 8. Surg. 2014;140(7):603–607.
- Baker PA, McQuoid S, Thompson JM, et al. Paediatr Anaesth. 9. 2011;21(4):428-434.
- 10. Data on file; 2018 internal study. Testing standardized to Mac 3 blades with manufacturer's corresponding handle. Sekonic® C-7000 SpectroMaster was used to measure light output from laryngoscopes enclosed in a black box designed to eliminate ambient light. N=23. calculated to deliver 95% confidence. Comparative bench data may not be indicative of clinical performance.

- 13. Call TR, Auerbach FJ, Riddell SW, et al. Nosocomial contamination of laryngoscope handles: challenging current guidelines. Anesth Analg. 2009;109(2):479-483.
- 14. Phillips RA, Monaghan WP. Incidence of visible and occult blood on laryngoscope blades and handles. AANA J. 1997;65(3):241-246.
- 15. Williams D, Dingley J, Jones C, Berry N. Contamination of laryngoscope handles. J Hosp Infect. 2010;74(2):123-128.
- 16. Miller DM, Youkhana I, Karunaratne WU, Pearce A. Anaesthesia. 2001:56(11):1069-1072.
- 17. Lowman W, Venter L, Scribante J. S Afr Med J. 2013;103(6):386–389.
- 18. Negri de Sousa AC, Vilas Boas VA, Levy CE, et al. Am J Infect Control. 2016;44(3):294-298.
- 19. The Joint Commission. Laryngoscopes Blades and Handles How to clean, disinfect and store these devices. https://www.jointcommission. org/standards_information/jcfaqdetails.aspx?StandardsFaqId= 1201& amp; ProgramId=46. Accessed Jan 24 2018.

The durability of reusable with the convenience of a single-use blade

Concerns exist regarding the performance, rigidity, and strength of some single-use laryngoscope blades compared with reusable blades.^{11,12} With its durable, metal construction, the Rüsch Polaris Laryngoscope Blade addresses these concerns, offering users the feel of a reusable blade with the convenience of a single-use blade.

Ready when you are

In times of critical situations, it's essential to have the right equipment on hand. The Rüsch TruLite Secure Laryngoscope is a single-use solution with a combined blade and handle. This fully disposable innovative system features reinforced critical components designed to perform in the toughest OR and field conditions.

The color-coded, all-in-one blade and handle combination enables quick size selection; the package design allows light source testing prior to opening. As a one-piece system, the Rüsch TruLite Secure Laryngoscope can be rapidly deployed with the potential to reduce time to intubation during emergency situations.

Additionally, our entire single-use portfolio offers:



The latest advances in laryngoscope blade illumination for reliable light when you need it most



Intuitive packaging and color coding to facilitate correct size selection



A broad range of blade designs and sizes to address diverse patient anatomies

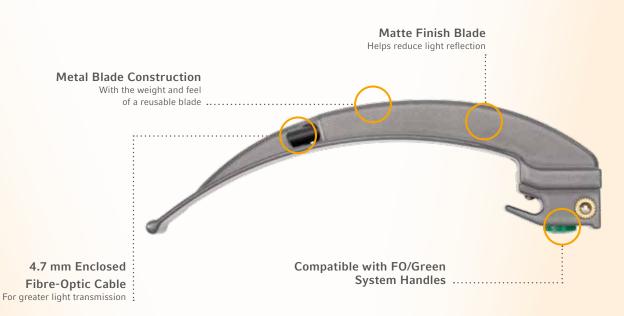
Single-Use Fibre-Optic Systems

Rüsch Polaris Single-Use Laryngoscope Blade

Low-Profile Blade Design

Reduced posterior flange height designed to improve visualisation and reduce the risk of dental trauma





Rüsch Polaris Single-Use Laryngoscope Blades								
REF.	DESCRIPTION	OVERALL LENGTH (MM)	DISTAL WIDTH (MM)		COLOR CODE	CASE QTY		
MACINTOSH BLADES								
4150110	Mac 1	94.5	9.9		White	10		
4150120	Mac 2	111.0	13.0		Blue			
4150130	Mac 3	133.0	14.0		Yellow			
4150140	Mac 4	149.0	13.0		Pink			
4150150	Mac 5	159.0	14.5		Dark Yellow			
MILLER BLADES								
4150002	Miller 00	66.5	12.8		Beige	10		
4150001	Miller 0	78.0	12.8		Violet			
4150010	Miller 1	103.0	12.8		Orange			
4150020	Miller 2	154.0	13.5		Grey			
4150030	Miller 3	195.0	13.5		Green			
4150040	Miller 4	205.0	19.0		Lavender			



Rüsch DispoLED Single-Use Laryngoscope Handle

Rüsch DispoLED Single-Use Laryngoscope Handle Ref. DIAMETER (CM) LENGTH (CM) WEIGHT (G) CASE QTY 77700 2.8 12 73 20

Rüsch GreenLite Single-Use Laryngoscope Blades

REF.	DESCRIPTION	OVERALL LENGTH (MM)	DISTAL WIDTH (MM)		COLOR CODE	CASE QTY		
MACINTOSH BLADES								
004551000	Mac 0	84	9.5		Peach	20		
004551001	Mac 1	94	9.5		White			
004551002	Mac 2	103	11.5		Blue			
004551003	Mac 3	132	15		Yellow			
004551004	Mac 4	162	15		Pink			
MILLER BLADES								
004550010	Mill 00	68	12		Beige	20		
004550000	Mill 0	78	11.5		Violet			
004550001	Mill 1	105	11.5		Orange			
004550002	Mill 2	158	14		Grey			
004550003	Mill 3	198	14		Green			
004550004	Mill 4	208	14		Lavender			

FO/ Green System Blades

Stainless-Steel Pin Built to withstand the forces

Compatible with

Conforming with

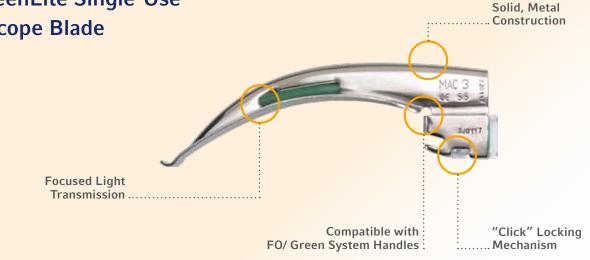
: of intubation

ISO 7376

Textured Grip Ergonomically designed finger grips for user comfort and ease of use

Battery Compartment Contains two alkaline AAA batteries. Safety features help prevent re-use

Rüsch GreenLite Single-Use Laryngoscope Blade



teleflex.com/laryngoscopes

004670002

004670003

004670004

Mill 2

Mill 3

Mill 4

155

195

205

14

14

14

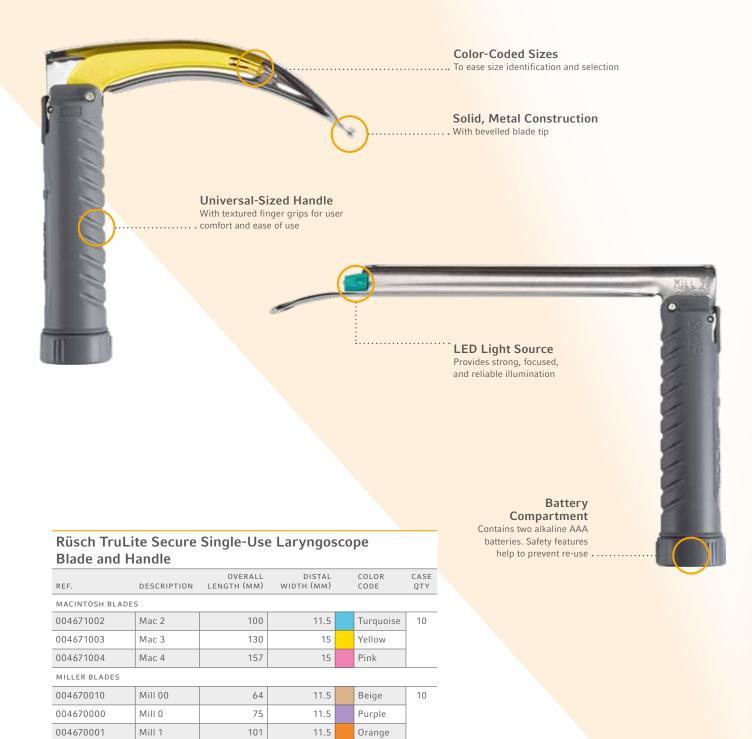
Grey

Green

Lavender

Single-Use Conventional Systems

Rüsch TruLite Secure Single-Use Blade and Handle Laryngoscope



Rüsch DispoGrip Single-Use Laryngoscope Handle



Rüsch DispoGrip Single-Use Laryngoscope Handle						
REF.	DIAMETER (CM)	length (cm)	WEIGHT (G)	CASE QTY		
88800	2.8	12	72	20		

Rüsch EquipLite Single-Use Laryngoscope Blade OVERALL LENGTH (MM) DISTAL WIDTH (MM) COLOR CASE REF. DESCRIPTION CODE QTY MACINTOSH BLADES

004651000	Mac O	83	9.5		Peach	20
004651001	Mac 1	93	9.5		White	
004651002	Mac 2	103	11.5		Turquoise	
004651003	Mac 3	134	15		Yellow	
004651004	Mac 4	160	15		Pink	
004651005	Mac 5	174	15		Dark Yellow	
MILLER BLADES						
004650010	Mill 00	66	11.5		Beige	20
004650000	Mill 0	78	11.5		Purple	
004650001	Mill 1	104	11.5		Orange	
004650002	Mill 2	158	13.5		Grey	
004650003	Mill 3	197	14		Green	
004650004	Mill 4	207	14		Lavender	

Battery Compartment Contains two alkaline AAA batteries. . Safety features help to prevent re-use

Rüsch EquipLite Single-Use Laryngoscope Blade

Solid, Metal Construction With bevelled blade tip Compatible with 3 Color-Coded LED Light Source **Conventional Handles** Provides strong, focused Large range of color-coded sizes and reliable illumination teleflex.com/laryngoscopes Teleflex is a global provider of medical technologies designed to improve the health and quality of people's lives. We apply purpose-driven innovation – a relentless pursuit of identifying unmet clinical needs – to benefit patients and healthcare providers. Our portfolio is diverse, with solutions in the fields of vascular and interventional access, surgical, anesthesia, cardiac care, urology, emergency medicine and respiratory care. Teleflex employees worldwide are united in the understanding that what we do every day makes a difference. For more information, please visit teleflex.com.

Teleflex is the home of Arrow, Deknatel, Hudson RCI, LMA, Pilling, Rüsch, UroLift, and Weck – trusted brands united by a common sense of purpose.

Corporate Office

Phone +1 610 225 6800, 550 E. Swedesford Road, Suite 400, Wayne, PA 19087, USA

Regional Offices

United States: Phone +1 919 544 8000, Toll Free 866 246 6990, cs@teleflex.com, 3015 Carrington Mill Boulevard, Morrisville, NC 27560, USA

Latin America: Phone +1 919 433 4999, la.cs@teleflex.com, 3015 Carrington Mill Boulevard, Morrisville, NC 27560, USA

International: Phone +353 (0)9 06 46 08 00, orders.intl@teleflex.com, Teleflex Medical Europe Ltd., IDA Business and Technology Park, Dublin Road, Athlone, Co Westmeath, Ireland

Australia 1300 360 226 Austria +43 (0)1 402 47 72 Belgium +32 (0)2 333 24 60 Canada +1 (0)800 387 9699 China (Shanghai) +86 (0)21 6060 7000 China (Beijing) +86 (0)10 6418 5699 Czech Republic +420 (0)495 759 111 France +33 (0)5 62 18 79 40 Germany +49 (0)7151 691 3004 Greece +30 210 67 77 717 India +91 (0)80 4093 4790 Italy +39 0362 58911 Japan +81 (0)3 6632 3600 Korea +82 2 536 7550 Mexico +52 55 5002 3500 Netherlands +31 (0)88 00 215 00 New Zealand 0800 601 100 Poland +48 22 4624032 Portugal +351 225 491 051 Singapore (SEA non-direct sales countries) +65 6439 3000 Slovak Republic +421 (0)3377 254 28 South Africa +27 (0)11 807 4887 Spain +34 91 198 84 31 Switzerland +41 (0)31 818 40 90 United Kingdom +44 (0)1494 53 27 61 For more information, please visit teleflex.com

Teleflex, the Teleflex logo, Arrow, Rüsch, EquipLite, Deknatel, DispoGrip, DispoLED, GreenLite, Hudson RCI, LMA, Pilling, Polaris, TruLite Secure, UroLift and Weck are trademarks or registered trademarks of Teleflex Incorporated or its affiliates, in the U.S. and/or other countries. Other names may be trademarks of their respective owners.

Information in this material is not a substitute for the product Instructions for Use. Not all products may be available in all countries. Please contact your local representative. Revised: 04/2019

© 2019 Teleflex Incorporated. All rights reserved.

