

# : HEINE® Laryngoscopes

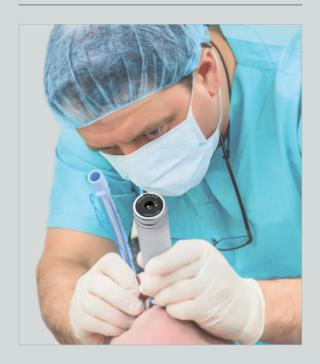
Quality you can rely on.

Always.



#### THIS EXCITES THE ANAESTHETIST:

# Complete reliability in every situation.



Anaesthetists need instruments that are 100% reliable and fail-safe in every situation. In addition to our fiber optic handles, there is now a new, additional range of laryngoscope handles that do precisely this. The EasyClean handles feature a strong, non-slip design and are available in three different sizes. The first in the world to be 100% waterproof.

Lighting is vital when it comes to intubation. And as so often the case, good was not good enough for us here. The HEINE LED $^{\rm HQ}$  is 3x brighter than conventional halogen light and offers ultra-realistic colour rendering. Vital for safe, fast intubation.





### THIS IMPRESSES THE HOSPITAL DIRECTOR:

# Green hospital concept is becoming a reality.

Sustainability, environmental balance, life cycle assessment and ecological footprint per patient, in short referring to the concept of a green hospital, are issues which are becoming increasingly important and more relevant. And this shows the benefit of reusable laryngoscopes.

The best type of waste is no waste at all. And medical waste is also expensive. While many disposable products are unavoidable in practices and hospitals, this generally should not apply to laryngoscopes.

Valid life cycle assessment figures from North America and Australia show almost identical results. The first study was conducted by Yale University Hospital<sup>2</sup> in the USA,

which performs approximately 60,000 intubations per year<sup>3</sup>. A second study conducted in Australia investigated two medium-sized hospitals with six operating rooms<sup>1</sup>.

Both studies independently confirm that the use of reusable laryngoscope systems leads to a significant reduction in greenhouse gas emissions of up to 85%.



#### THIS CONVINCES THE BUYER:

# Reusable laryngoscope systems pay dividends.

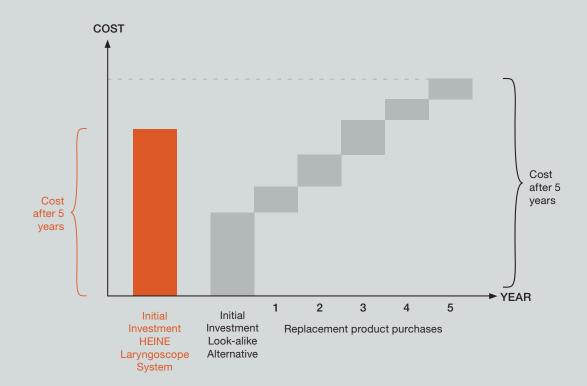
Studies show that the use of reusable laryngoscope systems in anaesthesia is significantly cheaper. Hospitals can achieve annual cost savings of up to 88 per cent by using reusable laryngoscopes rather than disposable instruments. At Yale University Hospital in the USA, life cycle costs were analysed on the basis of various reusable versus disposable laryngoscope combinations, with annual savings of up to US\$ 1.8 million, or 88%, determined?

We conducted a cost analysis with a representative selection of facilities. In the case of other reusable laryngoscope systems, the total costs are 30 % higher after five years due to high failure rates in processing and the associated replacement costs. Even after repeated autoclave cycles, there are no replacement costs for failure products associated with HEINE Classic+Laryngoscopes within this timeframe. Our lighting guarantee also applies.

Put it to the test and enter your data in our cost calculator. You will be amazed. After all, quality counts: heine.com/calculator



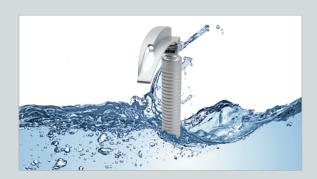




Cost Model is based on average values compiled from completed cost analyses for a representative sample of institutions that subsequently converted to HEINE Laryngoscopes and Handles. Example above is based on these values, as they apply to a 200 Blade Purchase where HEINE Blades are twice the price of a look-alike alternative and average estimated failure rates of the alternative laryngoscopes are as follows; 20% (of the initial quantity) in year 1, 40% (of the remaining quantity) in year 2, 60% (of the remaining quantity) in year 4, and 100% after 5 years.

#### THIS PLEASES THE HYGIENE PROFESSIONAL:

# The EasyClean LED Laryngoscope Handle is 100% waterproof.



The EasyClean LED Laryngoscope Handle is the first and only 100% waterproof LED handle that is, without dismantling, suitable for all sterilisation options. Worldwide. And it always remains watertight: whether it is submerged, sprayed or simply wiped off – no liquid gets through.

The non-slip wave design of the handle also makes it easier to wipe down with disinfectant.

The EasyClean LED Laryngoscope Handle is the first of its kind which can be sterilised without any laborious disassembly and reassembly in the case of immersion disinfection or by means of the low-temperature gas plasma process (STERRAD®/STERIS®).

This means that the preparation process is therefore extremely efficient, saves time and training costs, and, of course, meets all national and international standards.



Reprocessing process →	Wipe disinfection	Manual immersion disinfection	Low temperature gas plasma sterilisation (STERRAD®/STERIS®)	Mechanical cleaning + disinfection (thermal disinfector)	Steam sterilisation/ autoclave
Temperature	Cold	< 60°C	< 60°C	max. 93°C	max. 134°C/3min
with batteries	V	~	V	Batteries removed previously	Batteries removed previously
with HEINE LED	V	~	V	V	V

# THIS FASCINATES THE MEDICAL TECHNICIAN:

# 5 years guarantee.



Where others use low-cost steel, at HEINE, we use premium-grade chrome steel for our premium laryngoscope blade Classic+, which has high oxidation resistance and is relatively light in relation to the strength of the material. As if that were not enough, each laryngoscope blade is subject to a six-fold coating process. Failure costs are close to zero, with an average service life of over ten years in our experience.

Our fiber optic laryngoscopes can even withstand 4,000 standard autoclave cycles without illuminance falling below 1,000 lux, corresponding to the performance on delivery. You have our word on this. And a 5-year guarantee.

# REUSABLE versus DISPOSABLE.





# Reusable laryngoscope systems are the wise choice. In every respect.

We have been consistently optimising our fiber optic laryngoscopes for over 30 years with the same thing in mind – to provide doctors with durable instruments which enable them to work precisely, quickly and over a long period of time, while also ensuring maximum safety for patients. And always based on the idea that quality also has to pay off for facilities that choose HEINE products.

The tendency of some facilities to choose disposable products as a general rule is concerning and, quite frankly, difficult to understand. On the one hand, because the cost analysis clearly points towards reusable laryngoscope systems, even from a short-term perspective.

On the other hand, because the issues of waste avoidance and environmental pollution are also playing an increasingly important role for medical practices and hospitals.

We are also aware that there are some very delicate exceptional situations and areas of application in which the use of disposable instruments is unavoidable.

However, studies demonstrate that the use of reusable laryngoscopes in anaesthesia is significantly cheaper and also more environmentally friendly than disposable products <sup>1,2</sup>. Hospitals can achieve annual **cost savings of up to 88 per cent**<sup>2</sup> by using reusable laryngoscopes rather than disposable instruments.

For more information, please visit our website: **heine.com/reusable** 



<sup>&</sup>lt;sup>1</sup> McGain F, Story D, Lim T, McAlister S. Br J Anaesth. Financial and environmental costs of reusable and single-use anaesthetic equipment, 2017;118(6):862-869

<sup>&</sup>lt;sup>2</sup> Reusable Versus Disposable Laryngoscopes Environmental and Economic Considerations. Jodi D. Sherman, M.D., Lewis Raibley, B.Eng., Matthew Eckelman, Ph.D., Yale University, ASA 2014

<sup>&</sup>lt;sup>3</sup> Calculation is based on measurements from Yale University, assuming 60,000 intubations and 4,000 cleaning cycles per year in the case of laryngoscope systems

## SOPHISTICATED AND UNPARALLELED:

# The classics F.O.

Decades of experience. And particularly over 30 years of continuous improvements to the product, illumination and durability.

There's LED. And there's LEDHQ. HEINE has set a new standard which maintains that only the best is good enough, from the selection of materials to processing, from light intensity and thermal management to a colour rendering index as high as possible. That's what we call LED in HEINE Quality - or LEDHQ.

LEDHQ Win-win-win situation: light replacement is no longer necessary, batteries last much longer and maintenance and upkeep costs are reduced.

Unparalleled fiber optics. Up to 6,500 fiber-optic fibers ensure unprecedented durability and in particular optimum light transmission.

5-year guarantee. The steel we use at HEINE lasts a small eternity. All materials and surfaces are made in Germany. And as we make our laryngoscopes entirely ourselves, we offer a 5-year guarantee\*.

Exclusive fade-out function. For the battery to be replaced in good time, a slow, steady decrease in brightness indicates that battery power is decreasing.

Three handle sizes. The F.O. handles are available in the three sizes STANDARD, SLIM and SHORT, covering every preference. Of course, compatible with all blades according to ISO 7376 (green standard).

Our reusable fiber-optic laryngoscope systems meet all relevant national and international standards for reprocessing.



# AND MUCH MORE:

# The all-new EasyClean.

First and only LED handle for low-temperature gas plasma sterilisation (STERRAD®/STERIS®)\*. No disassembly required.

**100% waterproof** (IP68). This makes both wiping and immersion disinfection easier.

LED<sup>HQ</sup> technology is completely autoclavable.

**Secure-grip wave design.** Where a secure grip is needed, an instrument cannot be slippery. From this point of view, and for easier cleaning, we developed this handle surface.

Our reusable EasyClean laryngoscope systems not only meet all national and international standards, but also meet the stringent Californian requirements in relation to reprocessing.

For more information, studies and a video on the production process of HEINE Classic+ Laryngoscopes, visit our website:

heine.com/laryngoscope



#### ALWAYS THE RIGHT BLADE:

# The choice is yours.

Blades based on Miller, WIS or Macintosh, for adults, children or newborn babies.

**5 years guarantee.** After 4,000 standard autoclave cycles 134 °C/4 min, illuminance of at least 1,000 lux.

**Optimal light = optimal views.** The HEINE HiLite Fibre Optic (F.O.) fiber bundle, optimised for use with up to 6,500 individual fibres and refined directional characteristics, achieves the best possible illumination of the pharynx.

Easy to clean and sterilise, as there are no screw connections, openings, edges or corners.

New, innovative production technology for Classic+ blade enables even better illumination and durability.

HEINE Paed blades are specially developed for intubations for newborn babies and small children.

The FlexTip+ is a Macintosh Laryngoscope Blade with a tip which is adjustable through 70°. A lever controls the tip angle during intubation to lift the epiglottis, giving a clear view of the vocal cords. Contact with the upper row of teeth and unnecessary pressure on the tongue and soft tissue are avoided.

**Compatible with all handles** to the ISO 7376 (green standard).



# HEINE LARYNGOSCOPE BLADES

BLADE SIZE	OVERALL LENGTH	BLADE LENGTH	DISTAL WIDTH	ARTNO.
Mac 0	82 mm	66 mm	9mm	F-000.22.100
Mac 1	94 mm	78 mm	10 mm	F-000.22.101
Mac 2	114 mm	98 mm	14 mm	F-000.22.102
Mac 3m	134 mm	118 mm	14 mm	F-000.22.143
Mac 3	134 mm	118mm	14 mm	F-000.22.103
Mac 4	155 mm	139 mm	15 mm	F-000.22.104
Mac 5	177 mm	161 mm	15 mm	F-000.22.105
Miller 00	76 mm	51 mm	10mm	F-000.22.119
Miller 0	80 mm	55 mm	11 mm	F-000.22.120
Miller 1	100 mm	78 mm	12 mm	F-000.22.121
Miller 2	152 mm	130 mm	13 mm	F-000.22.122
Miller 3	192 mm	170 mm	13 mm	F-000.22.123
Miller 4	207 mm	185 mm	16mm	F-000.22.124
WIS 1	110 mm	85 mm	13 mm	F-000.22.131
WIS 2	130 mm	105 mm	16mm	F-000.22.132
WIS 3	160 mm	133 mm	16mm	F-000.22.133
Pead 0	82 mm	65 mm	12 mm	F-000.22.110
Pead 1	95 mm	78 mm	13 mm	F-000.22.111
FlexTip+ Mac 3	134 mm	115 mm	13 mm	F-000.22.313
FlexTip+ Mac 4	157 mm	137 mm	13 mm	F-000.22.314

# ALWAYS THE RIGHT HANDLE:

# HEINE Laryngoscope Handles with LEDHQ or XHL illumination.



HEINE LARYNGOSCOPE HANDLES WITH LEDHQ	BATTERY VERSION	RECHARGEABLE VERSION LI-ION
EasyClean LED Laryngoscope Handle suitable for 2 x C-batteries (LR14), complete* [01]	F-008.22.820	
NEW: EasyClean LED SLIM Laryngoscope Handle suitable for 2 x AA-batteries (LR6), complete* [02]	F-008.22.821	
NEW: EasyClean LED SHORT Laryngoscope Handle suitable for 3x AAA-batteries (LR03), complete* [03]	F-008.22.822	
Standard F.O. LED Battery Handle suitable for 2x C-batteries (LR14), compl.* [04]	F-008.22.860	
Standard F.O. 4 LED NT Rechargeable Handle, compl.		F-008.22.894
F.O. SLIM LED Battery Handle suitable for 2x AA-batteries (LR6), compl.* [05]	F-008.22.800	
F.O. 4 SLIM LED NT Rechargeable Handle, compl.		F-008.22.804
F.O. SHORT LED Battery Handle suitable for 2x AA-batteries (LR6), compl.* [06]	F-008.22.812	
F.O. 4 SHORT LED NT Rechargeable Handle, compl.		F-008.22.424

HEINE LARYNGOSCOPE HANDLES WITH XHL	BATTERY VERSION	RECHARGEABLE VERSION LI-ION
Standard F.O. Battery Handle suitable for 2x C-batteries (LR14), compl.* [04]	F-001.22.860	
Standard F.O. 4 NT Rechargeable Handle, compl.		F-007.22.894
F.O. SLIM Battery Handle suitable for 2x AA-batteries (LR6), compl.* [05]	F-001.22.800	
F.O. 4 SLIM NT Rechargeable Handle, compl.		F-007.22.804
F.O. SHORT Battery Handle suitable for 2x AA-batteries (LR6), compl.* [06]	F-001.22.812	
F.O. 4 SHORT NT Rechargeable Handle, compl.		F-007.22.424

<sup>\*</sup> Delivery without batteries.

HEINE NT 4 TABLE CHARGER FOR RECHARGEABLE VERSION	
NT4 table charger without handle, with adaptors for Standard F.O. 4 NT Laryngoscope Insert and F.O. 4 SHORT NT Laryngoscope Handle [07]	X-002.99.494
Adaptor for F.O. 4 SLIM NT Handle	X-000.99.086

# QUALITY made in GERMANY.

As a global leader in the manufacture of primary diagnostic instruments with over 500 employees, HEINE Optotechnik has been a 100% family-owned and managed company for more than 70 years. And to this day, we continue to develop and manufacture HEINE instruments exclusively at our production facilities in Germany, where we combine decades of experience and craftsmanship with state-of-the-art manufacturing technologies.

We're represented in over 120 countries around the world, with subsidiaries in Australia, the US and Switzerland as well as around 3,000 representatives, importers and specialist dealers.

We look forward to hearing from you - and would like to know more about your opinions, desires and suggestions regarding our products.

www.heine.com











