

THE BOOK OF TRUTH



**There are 27
good reasons to
trust the quality
of HEINE blades.**

The whole truth about
our premium reusable
laryngoscopes.



FOREWORD

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. We continue to develop and manufacture HEINE instruments at our facilities in Germany, where we combine decades-long experience and craftsmanship with the most modern manufacturing technologies.

We have been manufacturing laryngoscopes since 1961. Over time, we have built up an immense wealth of expertise and experience in the field of intubation.

Our goal is to support our customers with products that offer the highest level of performance, reliability, and patient safety. This is why we have been continuously improving and optimising the performance of our reusable laryngoscopes.

Customers that choose HEINE products know that quality is of vital importance. They understand that the current shift from high-quality products to disposables is compromising performance, driving up costs, and damaging the environment.

A successful, sustainable society needs a healthy environment. But single-use products generate alarming amounts of waste, and their manufacture and distribution drive up greenhouse gas emissions. Even if they can be recycled, which many cannot, this requires even more energy, making their carbon footprint even worse. The solution is to reduce our reliance on single-use products.

When customers compare prices, our products generally do not appear to be the most economical at first glance. But based on their quality and service life, they typically reach the break-even point in less than three years compared to single-use or cheap reusable lookalikes.⁶ In other words: HEINE blades are worth their price.

By steadily adopting smart and sustainable practices, hospitals can drive cost savings and efficiency improvements. By choosing HEINE reusable laryngoscopes instead of disposables, hospitals can achieve savings of up to 88%.^{1,5}

Most standard surgical instruments used in ORs are reusable and are sterilised on a daily basis. Yet misinformation is rife, and somehow hospitals have come to believe that laryngoscopes should be an exception.

So let's set the record straight: sterilisation systems are better than ever and do a fantastic job of reprocessing well-designed medical devices. Reusable laryngoscopes are safe and reliable. It's that simple.

In the following pages we will address the fabricated falsehoods and let the facts and figures from independent studies speak for themselves.

Because there are 27 good reasons to choose reusable HEINE laryngoscopes – and that's the truth.

CONTENTS

04 Foreword

08 NEW: OUR EXCLUSIVE 10-YEAR GUARANTEE

- Reason No 1:** Our new and exclusive 10-year guarantee
- No 2:** 60 years of experience and continuous innovations
- No 3:** A singular raw material with hidden strengths
- No 4:** Meticulous craftsmanship
- No 5:** A very special coating

20 SAFE FOR PATIENTS

- Reason No 6:** Simple and safe reprocessing thanks to HEINE smoothSURFACE
- No 7:** No risk of injury thanks to HEINE smoothSURFACE
- No 8:** Unparalleled quality of HEINE Fiber Optics
- No 9:** Optimised illumination for endotracheal intubation with HEINE Fiber Optics
- No 10:** The fully integrated fiber optic bundle
- No 11:** The heat resistance of HEINE Fiber Optics
- No 12 and 13:** Sealed and protected HEINE Fiber Optics
- No 14:** The polished end of HEINE Fiber Optics
- No 15:** 100 % quality control: 51 inspections performed on every single blade
- No 16:** The exclusive HEINE Paed blade for newborns and infants
- No 17:** There's LED. And there's LED in HEINE Quality
- No 18:** The exclusive HEINE EasyClean laryngoscope handle
- No 19:** The new high-visibility marking on the HEINE Classic+ blades

56 ECONOMICAL – THANKS TO COST SAVINGS

- Reason No 20:** Their outstanding durability makes reusable HEINE blades more affordable than single-use blades
- No 21:** Their outstanding durability makes reusable HEINE blades more affordable than other reusables
- No 22:** Streamlined reprocessing workflows and processes with HEINE smoothSURFACE
- No 23:** Reusable laryngoscopes make up a tiny proportion of reprocessing costs

70 SUSTAINABLE – THANKS TO A SMALLER ENVIRONMENTAL FOOTPRINT

- Reason No 24:** Reusable HEINE blades have a smaller environmental footprint than disposables
- No 25:** Reusable HEINE blades reduce waste
- No 26:** Reusable HEINE blades are more durable than lookalike blades
- No 27:** Sustainable right from the start

86 Cost calculator

88 The HEINE laryngoscopes

The HEINE Classic+ blades

The HEINE EasyClean LED handle

The HEINE F.O. handle

**NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE**

The first and only one
with a 10-year guarantee.



Not a single one with more
than a 5-year guarantee.





NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE

Reason No 1:

Our new and exclusive
10-year guarantee.

Choose HEINE blades for 10 years of maintenance-free service.

We firmly believe in the quality of our product. That's why we offer an unmatched 10-year guarantee on our HEINE Classic+ F.O. blade.³

This is the longest guarantee on the market today – and the only one to specify a minimum level of light transmission.

So how can we offer such an unbeatable guarantee? Easy.

We know just how much care goes into making our high-quality blades. And we know some HEINE blades are still going strong after 15 or 20 years, even with repeated autoclaving.

It all starts with the very best stainless steel, the **raw material** our blades are made from. We **coat the steel** in our own electroplating plant, so we can make sure the blades' surface meets our own exceptionally high standards. Keeping it in-house means we do not have to rely on suppliers.

All HEINE blades are made exclusively in Germany by highly qualified industrial professionals. The secret of their success is a combination of skilled manual work and computer-controlled milling machines.

We carefully inspect the quality of our blades at multiple stages of the production process. Every single blade has to be perfect – that's why we **check and test each one** a total of 51 times!

Thanks to our focus on quality materials and production processes, a HEINE blade is **more affordable than cheap lookalike blades** in less than three years. See the comparison on **page 61**. And they **beat single-use blades for affordability** within the first year.

Our products also offer an exceptionally long service life, highlighting the **environmental benefits** of reusable products.

**NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE**



We do a lot of this



And none of this

Reason No 2:

60 years of experience and continuous innovations.

HEINE thrives on new ideas and continuous improvement. But it also has decades of industry experience.

The first HEINE laryngoscopes were launched in 1961, and we've been making them better and better ever since. For around 60 years now, we've been receiving feedback from both the market and our customers and gaining experience in **material selection, processing, and manufacturing** to constantly and continually make superior products.

This approach has led to over 30 patents and utility models. It is the reason behind the unrivaled performance and **reliability** of our **blades** and **handles**. And it explains why we can offer our customers this kind of **10-year guarantee**.

Our one-of-a-kind Classic+ blade draws on decades of hard work and investment. Find out more on pages **15, 17, 19, 23, and 27**.

**NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE**



Reason No 3:

A singular raw material
with hidden strengths.

Ever thought that a blade couldn't break during intubation? It really does happen⁴ – but not to HEINE blades.

At HEINE, we use only the highest-quality surgical-grade steel for our premium Classic+ laryngoscope blades. Highly resistant to oxidation, it is also particularly lightweight.

For the engineers out there, we're talking about 304 grade stainless steel with a tensile strength (Rm) of around 660 N/mm².

See the section on HEINE blades' rock-solid reliability (page 43).

**NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE**



Reason No 4:

Meticulous craftsmanship.

After metalworking, we spend hours grinding, sandblasting, and polishing our blades using special stones. This removes and deburrs even the tiniest edges, providing the smoothest finish to protect the patient's airway.

As we mentioned before, we believe in quality.

So all these steps have to be completed before we are satisfied that the surface is safe and smooth enough for our customers.

Then, and only then, do we give a blade the HEINE **smoothSURFACE** quality label.

Find out more on [page 23](#).

**NEW: OUR EXCLUSIVE
10-YEAR GUARANTEE**

24

Cr

Chromium

Reason No 5:

A very special coating.

The special surface of HEINE blades enables safe intubation and largely eliminates glare. While our employees only get to enjoy each blade's satin-finished shine for a short while, our many thousands of customers around the world can appreciate it for many, many years to come.

A HEINE blade has an average service life of 12 years, but in practice they often last far longer. Our blades are in their element during intubation, but they certainly don't have it easy the rest of the time. Thrown into boxes and basins, washed and scrubbed with disinfectants, shaken on metal grids with other instruments, and exposed to extreme heat, a blade's life can be tough.

Despite all of this, we offer a **10-year guarantee** (see [page 10](#)). Because the surface we give our blades rivals that of high-end surgical instruments.

We start by applying two layers of primer to the stainless steel base to make the final chrome layer smoother and more resistant. Before chrome plating, we apply our special HEINE layer, which we keep as secret as the recipe for Coca-Cola. This, too, serves to ensure the blade's durability and robustness, as well as preparing the blade for the HEINE **smoothSURFACE** quality label. Finally it's time for the chrome plating – and the result is a smooth, safe, and durable finish that meets our customers' exacting standards.

Easy to
reprocess.



Just as easy
to reprocess.



**smooth
SURFACE**

Reason No 6:

Simple and safe
reprocessing thanks to
HEINE smoothSURFACE.

A properly reprocessed HEINE Classic+ laryngoscope blade has never caused a hospital-acquired infection.

Here's what the HEINE smoothSURFACE quality label promises:

- ▶ **Chrome plating** with unmatched smoothness.
- ▶ Gentle curves, easy-to-clean transitions.
- ▶ Formed from a single piece of stainless steel with a **fully integrated fiber optic bundle** for Classic+ Macintosh and Paed.
- ▶ No recesses or gaps.
- ▶ No holes or screws.

In short, our blades are quick, easy, and safe to clean.



Reason No 7:

No risk of injury thanks to HEINE smoothSURFACE.

The edges of the blade are particularly important when intubating a patient. Injury to the larynx and pharynx can all be avoided through proper design and manufacture.

That means a blade cannot have:

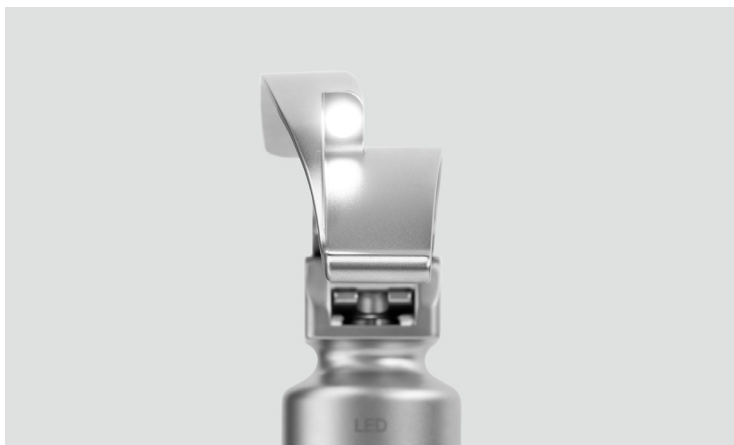
- ▶ hard corners or rims;
- ▶ sharp edges;
- ▶ or even points, however small they might be.

We ensure that all HEINE blades meet these criteria. Every single one is inspected 51 times to ensure perfect results.

Only once this process is complete will a HEINE blade have earned the smoothSURFACE quality label.

See Reason 4 to discover how meticulously we craft our blades.

**SAFE FOR
PATIENTS**



Reason No 8:

Unparalleled quality of HEINE Fiber Optics.

Our Fiber Optic (F.O.) blades deliver unbeatable performance and reliability with their bright, focused illumination.

Our first fully integrated F.O. blade, developed in 1980, featured a fiber bundle with some 6,500 individual fibers. Since then our blades have gone from strong to stronger.

Only the best flexible optical fibers are good enough for our fiber bundles.

Bundling, sealing, and polishing are complex processes, but we make absolutely sure that none of the fibers break, the luminous efficiency is perfect, and the surfaces at the proximal and distal ends are precise and mirror-smooth.

Find out more on the following pages and on [page 39](#).

Learn more about our [10-year guarantee](#) on [page 10](#).



HEINE blade



Lookalike blade

Reason No 9:

Optimised illumination for endotracheal intubation with HEINE Fiber Optics.

Medical professionals know that where the light shines is just as important as how bright it is.

On the left, focused straight ahead and two centimetres from the tip of the blade, is the light from a HEINE blade. It is shining directly onto the epiglottis and the vocal cords – exactly where you need it.

That's simply not the case with many other blades. Far less is visible in the image on the right.

The secret to a great blade doesn't lie in the number of glass fibers, nor in high lux and lumen levels.

What counts is the luminous efficiency around two centimetres from the tip of the blade. And that's where our blades excel. The comparison on the left says it all.

Fully integrated Fiber Optics.



Leaves us
speechless.



Reason No 10:

The fully integrated
fiber optic bundle.

Providing the most illumination and eliminating the possibility of cross-contamination is HEINE's primary objective. When this is achieved, it translates into performance, reliability, and safety for the provider and the patient.

That's why our fiber bundle is fully integrated within the blade, offering a robust solution that will last for many years to come.

At HEINE, we do things our own way. From the very special method we use to make our Macintosh blades to our unique 10-year guarantee. And it goes without saying that there's no need to take things apart or reassemble them after cleaning.

The HEINE smoothSURFACE quality label offers even more peace of mind. Find out more on pages 23 and 25.

134°
160°

Reason No 11:

The heat resistance of HEINE Fiber Optics.

Even after numerous autoclave cycles, you still get bright, reliable illumination from your HEINE Classic+ blade.

We go the extra mile when it comes to testing our fiber optic bundles. And we seal them with a proprietary adhesive at 160°C.

All despite the fact that reprocessing temperatures – even in a steam autoclave – only go up to 134°C at most.

Better safe than sorry!

**SAFE FOR
PATIENTS**



Reason No 12 and 13:

Sealed and protected HEINE Fiber Optics.

To ensure no liquids can enter the blade during intubation or reprocessing, and to avoid cross-contamination, our fiber bundles aren't just glued together; they're pressed in too.

We use a steel ring on the proximal end of the fiber bundle to ensure a perfect seal and to protect the bundle when the blade is repeatedly engaged.

At the same time, this also ensures the light is transmitted from the handle to the blade as effectively as possible, eliminating light leaking from the connection point.

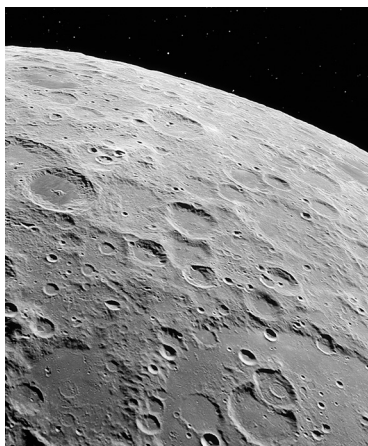
With German thoroughness and our determination to achieve perfection, we perform a pressure test at 3 bar to check the seal. As you would expect, we do this with every single blade as part of our **100% quality control.**

We design our blades to be tough. However many reprocessing cycles they endure over their long life, they keep coming back for more.

For comparison purposes, a car tyre has a pressure of about 2 bar.



A picture of how the end of
a HEINE fiber optic bundle
would look



A picture of how the end of
a competitor's fiber optic
bundle would look

Reason No 14:

The polished end of HEINE Fiber Optics.

We take care to grind the end of the fiber bundle nice and smooth.

That makes sure every part of the blade can be cleaned quickly and effectively (which is also the idea behind HEINE [smoothSURFACE](#)).

It also ensures the light travels unhindered from the handle to the blade without scattering or loss of brightness. So the light that comes out of the tip is uniformly bright, with no shadows.

Find out more as of [page 27](#).

0 incidents
in the last 10 years.



2,839 incidents
in the last 10 years.⁴





Reason No 15:

100 % quality control:
51 inspections performed
on every single blade.

Absolute reliability is essential during intubation. So we test and inspect our blades a total of 51 times before delivering them.

That's 51 times per blade. And it's not some kind of random check. No, we really do inspect every single blade!

Nothing escapes our scrutiny. We examine edges and surfaces, check the ball bearings are secure, make sure the fiber optic bundle is sealed, confirm the illumination is properly focused, and check the connection between the blade and handle.

**SAFE FOR
PATIENTS**



Reason No 16:

The exclusive
HEINE Paed blade for
newborns and infants.

Intubating newborns is a particularly difficult and demanding task. Often, a practitioner only has seconds to carry out the procedure, because when patients (especially babies and small children) are suffering from hypoxia, urgent and swift care is required.

The exclusive design of HEINE Paed blades gives medical professionals the flexibility they need to tackle any situation.

This allows both direct and indirect epiglottis manipulation. No other blade can offer that – and in situations where every second counts, it could make all the difference.



HEINE
LED^{HQ}



Conventional
LED

Reason No 17:

There's LED. And there's LED in HEINE Quality.

Intubation needs to be performed swiftly and safely. A key step is to illuminate the pharynx with bright, **evenly focused light**. HEINE is setting new standards with its

LED in HEINE Quality – or LED^{HQ}.

Heat is the biggest enemy of LED performance. That's why we use ceramics, heat-conducting foils, and aluminum heat sinks to manage the heat before it can do any damage.

Careful thermal management keeps the LED^{HQ} system in HEINE laryngoscope handles within the ideal temperature range. So you get consistent performance and nearly unlimited operating life.

Say goodbye to replacing bulbs – our LED^{HQ} handles are almost completely maintenance-free!

DOES NOT need
to be disassembled for
sterilisation.



Needs to be
disassembled for sterilisation
AND then reassembled.



Reason No 18:

The exclusive HEINE
EasyClean laryngoscope
handle.

Here's another exclusive HEINE feature that simplifies reprocessing, improves patient safety, and meets all regulatory requirements (also see Reason 6 – simple and safe reprocessing thanks to HEINE **smoothSURFACE**).

The HEINE EasyClean laryngoscope handle is a 100%-waterproof LED handle that does not require disassembly to be disinfected or sterilised.

Benefit 1: No liquid can penetrate the interior during wipe-down or immersion (high-level disinfection).

Benefit 2: No need to remove either the batteries or the LED illumination unit during low-temperature sterilisation (STERRAD®, STERIS VHP®).

Benefit 3: Autoclavable HEINE LED technology eliminates the need to remove the illumination unit when sterilising in an autoclave.

Benefit 4: Non-slip wave design makes it easier to wipe-down the handle after use for low-level and intermediate-level disinfection.

Benefits 5 and 6: LED^{HQ} illumination is three times brighter than conventional halogen illumination and has a virtually unlimited operating life.

Single-use handles add batteries, LEDs, and harmful plastics to the **waste stream** after every intubation procedure. Doesn't an unlimited operating life sound like a better option?

3

Clearly visible:
the new marking on
our Classic+ blades

3

Hardly noticeable:
the marking on
other blades

Reason No 19:

The new high-visibility marking on the HEINE Classic+ blades.

“Quick! Hand me that Mac 3!” Sometimes, intubation requires swift action – and, when that’s the case, mistakes must be avoided at all costs. The new marking on our Classic+ blades is instantly visible and easy to read, even through the sterile packaging. So you can be confident you’re reaching for the right blade.

We made this change based on feedback from medical professionals who use our products. It was a great suggestion, and one that shows how we are still striving to improve even after 60 years of developing outstanding products. We believe in listening to our customers – and we always will.

Cost of 10,000 intubations
and sterilisation cycles
6,000 €¹



Cost of 10,000 intubations
with single-use blades

43,000 €¹



Reason No 20:

Their outstanding durability makes reusable HEINE blades more affordable than single-use blades.

Studies show that it is much cheaper to use reusable laryngoscopes than single-use. The numbers speak for themselves:

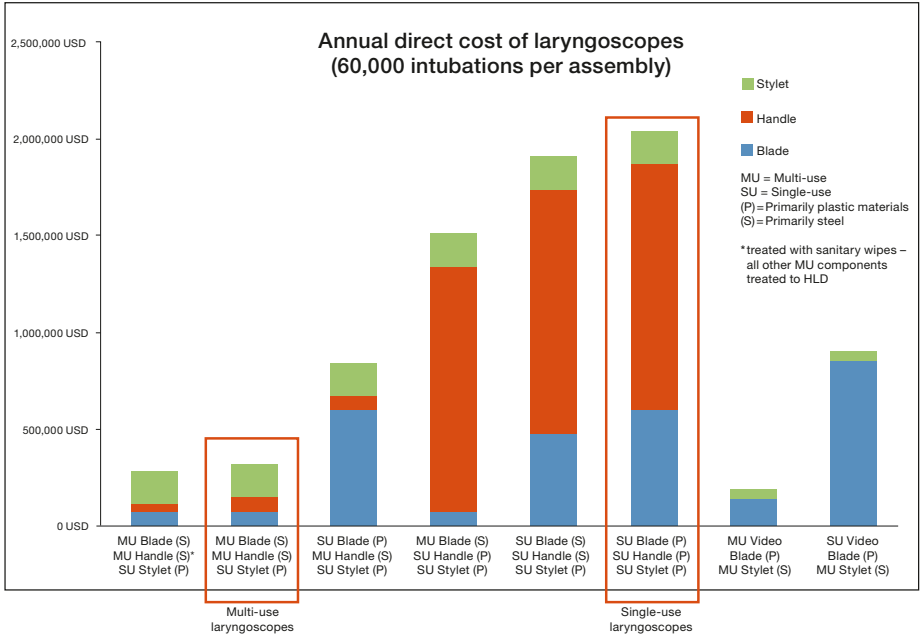
Disposable blades are about 7 times more expensive than reusable (high level disinfection).¹

Even with sterilisation, the reusable option comes to 6,000€ compared to 43,000€ for single-use.

Life cycle costing (LCC) is a standardised,

internationally recognised, and scientifically approved method of quantifying the true cost of a product and/or process. Purchasers can use LCC to calculate costs over a product's entire life cycle – from production to disposal.

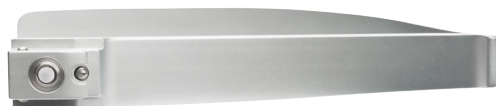
At Yale University Hospital in the US, the life cycle costs of various reusable laryngoscopes versus single-use combinations were analyzed based on 60,000 intubations per year, and the calculated savings came to up to USD 1.8 million or 88%.¹



We'd be delighted to tell you more about this study. Simply write to marketing@heine.com.

**ECONOMICAL – THANKS
TO COST SAVINGS**

A HEINE blade after
4,000 intubations.



A lookalike blade after
250 intubations.



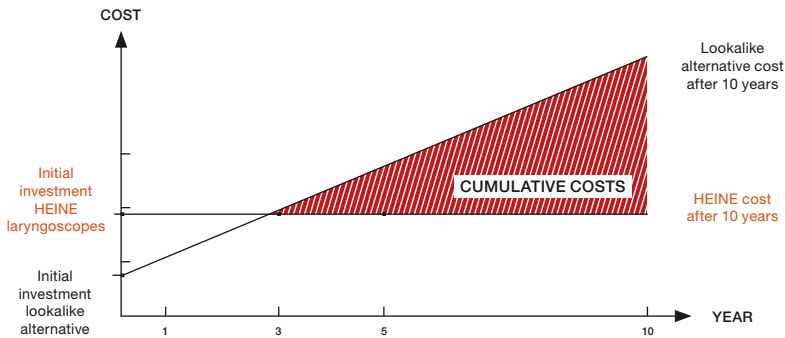
Reason No 21:

Their outstanding durability makes reusable HEINE blades more affordable than other reusables.

Even compared to blades that are only half the price, a HEINE system often pays for itself in under three years.⁷

Why? Because HEINE blades still function flawlessly in situations where cheaper

lookalikes break or have to be replaced. A study indicates that an average of 10 blades per operating room are replaced due to failure caused by routine autoclaving.



The cost of other reusable laryngoscopes is typically 8–19% higher after two years due to high failure rates in reprocessing and the corresponding replacement costs.

HEINE Classic+ laryngoscopes keep going strong even after repeated autoclave cycles. And zero failures mean zero replacement costs!

Remember: our products come with an exclusive **10-year guarantee** (see [page 10](#)).

ECONOMICAL – THANKS
TO COST SAVINGS

LET'S SEE WHAT H PROFESSIONALS H



The Ottawa Hospital, a large tertiary Canadian Hospital, purchased a bulk order of HEINE blades for use in the main operating rooms in the early 2000s.

Nearly 20 years later, despite almost daily usage, a sizable quantity of that initial order remains in circulation. Since the initial HEINE order, laryngoscope blades from competing companies were purchased as part of cost containment strategies.

With the passage of two to five years, however, the performance of the competitor's blades rapidly deteriorated, requiring reinvestment in new HEINE blades.

The experience of the Ottawa Hospital is that HEINE laryngoscope blades are durable and reliable in a high-use environment, which makes them the preferred blades for the main operating rooms.

*Gregory Krolczyk, MD, Anesthesia Equipment Manager, Civic Campus,
The Ottawa Hospital, Canada*

HEALTHCARE HAVE TO SAY:



For the past 12 years I have used HEINE LED laryngoscopes exclusively for direct laryngoscopies because of their elegance, reliability, and quality of construction. I particularly appreciate the low profile of the MAC blades compared to blades from other manufacturers.

I always seek out the HEINE product to use if presented with a more cumbersome product.

*Giuseppe Delvicario, MD, DTM&H (ENG), FRCP (C), ABA,
St. Paul's Hospital, Vancouver, Canada*



We have used HEINE blades and handles for many years now at the Rockyview General Hospital in Calgary. We have tried other brands and they were not as durable or as bright.

We are very happy with our new EasyClean Handles because, as mentioned previously, they are bright, durable, and waterproof.

I am responsible for all the ordering for ICU and Respiratory and Special Care Nursery, as well as our Broselow cart.

I will not order anything but HEINE, it is a quality product that I would feel comfortable using on my own family members.

*Stacy Kensett RRT, CRE, Respiratory Supervisor ED/Wards/Outreach,
Rockyview General Hospital, Calgary Canada*

**ECONOMICAL – THANKS
TO COST SAVINGS**

No HEINE blade has to
be dismantled
for reprocessing.



Other blades have to
be dismantled
for reprocessing.



Reason No 22:

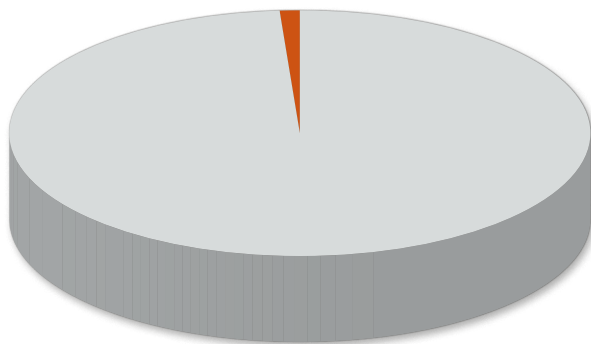
Streamlined
reprocessing workflows
and processes with
HEINE smoothSURFACE.

Sometimes it's best to keep things simple. HEINE blades can be reprocessed in one piece. They don't need to be disassembled or reassembled.

This saves time and money:

- ▶ Eliminates the risk of mistakes during disassembly and assembly.
- ▶ Parts cannot get lost.
- ▶ Less time and effort required for training.
- ▶ Gets blades back in use quicker.

**ECONOMICAL – THANKS
TO COST SAVINGS**



1%

Share of reprocessing
costs of reusable blades

Reason No 23:

Reusable laryngoscopes make up a tiny proportion of reprocessing costs.

Another common misconception is that laryngoscopes contribute considerably to reprocessing costs. Actually, the opposite is true.

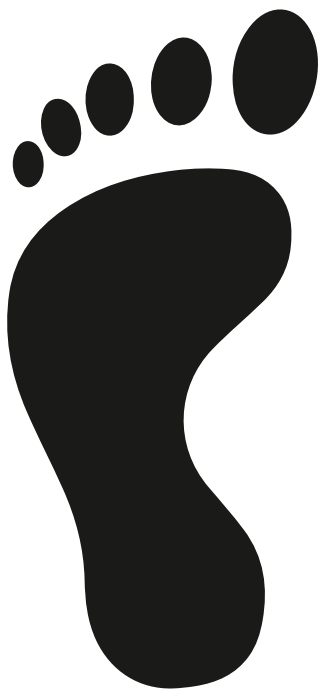
Laryngoscopes account for just € 1 of every € 100 a hospital spends on reprocessing surgical instruments.¹

Laryngoscope blades and handles are reprocessed together with other surgical instruments, so switching to single-use devices does not significantly reduce autoclave costs.

The environmental
footprint of HEINE reusables.



The environmental
footprint of disposables.



Reason No 24:

Reusable HEINE blades
have a smaller environmental
footprint than disposables.

Single-use plastic blades have a 5- to 6-times-larger carbon footprint than reusable stainless steel blades that are repeatedly disinfected. Even much higher emissions are generated when single-use metal blades are used.¹

In terms of their life cycle assessment (LCA), we calculate that the environmental impact of single-use metal blades is even worse due to the additional energy required for mining and refining.

Protecting the environment is taking on increasing urgency in all sectors – and healthcare is no exception. Key issues include air pollution caused by manufacturing and transportation, increases in waste and greenhouse gas emissions, and rising energy consumption, especially

of fossil fuels. The results of two independent studies from North America and Australia make interesting reading. Both were based on LCA figures for reusable versus single-use laryngoscopes – and both revealed almost identical results.

The first study was conducted by Yale University Hospital in the US, which performs around 60,000 intubations a year.¹

The second study carried out in Australia looked at two medium-sized hospitals with six operating rooms.⁵

Both studies showed that the use of reusable laryngoscopes cut greenhouse gas emissions significantly, reducing them by up to 85 %.

SUSTAINABLE – THANKS TO
A SMALLER ENVIRONMENTAL FOOTPRINT

FASCINATING



The healthcare sector is responsible for 10% of total greenhouse gas emissions in the United States. In addition to surgical treatment, anaesthesiology contributes considerably to these emissions.

Chung JW, Meltzer DO: Estimate of the carbon footprint of the US Healthcare Sector



Waste management modeling... using U.S. average rates of recycling plastics (6%) and metals (30-70%), while remaining solid waste is either landfilled (80%) or incinerated (20%).

*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*



This is precisely why numerous initiatives (such as 'Greening the operation room' or 'Healthier Hospitals') have been launched worldwide. International standards such as the ISO 14001 environmental management system standard have been introduced in hospitals.

*Practice Green Health.org, Healthier Hospitals.org,
Certification Europe.com*

ING FACTS



Health care's climate footprint is equivalent to 4.4% of global net emissions (2 gigatons of carbon dioxide equivalent).

Green Paper Number One: Healthcare's climate footprint, Healthcare without harm in collaboration with Arup, September 2019



Our results strongly suggest that reusable rigid laryngoscopy handles and blades result in significantly lower environmental impacts when compared to single use device (SUD) alternatives. This is primarily due to the materials and energy required to manufacture multiple SUDs versus one reusable device.

*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*



The use of medical products within the healthcare supply chain account for the largest percentage of total emissions released, at 71%.

European health sector must take responsibility for its ecological footprint, KLUG, Deutsche Allianz Klimawandel und Gesundheit (German Alliance on Climate Change and Health)



If the health sector were a country, it would be the fifth-largest emitter on the planet.

Green Paper Number One: Healthcare's climate footprint, Healthcare without harm in collaboration with Arup, September 2019

**SUSTAINABLE – THANKS TO
A SMALLER ENVIRONMENTAL FOOTPRINT**

4,000
intubations



4,000
intubations



Reason No 25:

Reusable HEINE blades
reduce waste.

Using products once and then throwing them in the trash is a terrible waste of resources. Why throw away huge quantities of metal and plastic, especially if there are better reusable alternatives?

Single-use laryngoscopes must be disposed of as regulated medical waste (RMW) to avoid contaminating the environment. Healthcare organizations typically pay 6 to 10 times more to dispose of RMW compared to standard solid waste.¹

Medical devices often contain significant amounts of plastics and metals. That makes recycling both complex and costly. As a result, RMW will often end up in landfills or waste incineration plants.¹

By using a reusable HEINE blade over many years, you avoid the need to constantly manufacture and dispose of new products. Disposal and recycling only take place once, decades after the blade's first use. This is the best approach both environmentally and financially.

We believe in sustainable solutions because we're in this business for the long haul. And, thanks to our exclusive **10-year guarantee**, you can be too!

SUSTAINABLE – THANKS TO
A SMALLER ENVIRONMENTAL FOOTPRINT

FASCINATING



The fact that reusable laryngoscope blades are washed together with other surgical instruments means the number of washing cycles isn't measurably reduced if disposable blades are used.

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



Maintenance costs and depreciation for dishwashers and sterilisers were not included in the fixed annual costs. Since far more surgical equipment needs reprocessing anyway, these costs wouldn't change whether anaesthesia instruments were actually used or not.

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

ING FACTS



More than 70% of a health system's greenhouse gas emissions are then embedded in products and services they buy.

climatecouncil.noharm.org



The healthcare sector is contributing an enormous amount of harmful emissions, which in turn undermines the health of the same population it is meant to heal. The healthcare sector has a unique opportunity to be a global leader in protecting health from climate change, starting with reducing its own GHG emissions.

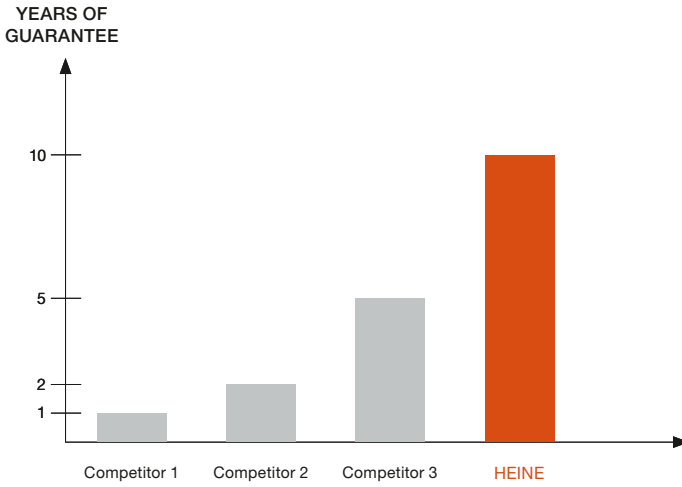
*European Healthcare Climate Council,
noharm-europe.org*



The findings are clear and the stakes could not be higher. We cannot delay action on climate change. We cannot sleepwalk through this health emergency any longer.

*Tedros Adhanom Ghebreyesus,
WHO director general*

**SUSTAINABLE – THANKS TO
A SMALLER ENVIRONMENTAL FOOTPRINT**



Reason No 26:

Reusable HEINE blades
are more durable than
lookalike blades.

The most environmentally friendly product is a product that lasts as long as possible. Sometimes it's that simple.

Here is a comparison of guarantees given by some blade manufacturers, as officially stated in their communication.

We do not want to comment further at this point, but we believe the graph speaks for itself.

Find out more on [page 61](#).

**SUSTAINABLE – THANKS TO
A SMALLER ENVIRONMENTAL FOOTPRINT**



Reason No 27:

Sustainable right
from the start.



Environmental responsibility starts with the manufacturing process. In June 2020, HEINE took a major step forward in making its manufacturing operations more sustainable.

The building is fully compliant with the German Energy Saving Ordinance (EnEV) and in some cases even exceeds the required standards.

A key goal was to avoid the use of fossil fuels. The building is cooled in summer by a groundwater source heat pump and heated in winter by recovering energy from the waste heat generated by the on-site machinery.

Greenery covers almost half of the site, as well as the roof.

So the building might look snow-white – but in actual fact it's green!



Cost calculator

Sometimes numbers speak louder than words.

Simply enter your facility's figures in our cost calculator to find out how a HEINE laryngoscope can save you money and reduce your environmental footprint.

Alternatively, get in touch with us and we will be more than happy to prepare this for you.

marketing@heine.com

Always the right blade:

The choice is yours.

- ▶ Blade types: Macintosh, Miller, WIS, or Paed.
- ▶ In all relevant sizes.
- ▶ For every intubation technique, every habit, and every preference.
- ▶ But always made in Germany.

Compatible with all laryngoscope handles according to ISO 7376 (Green Standard).



Classic+ Macintosh



Classic+ Miller



Classic+ WIS



Classic+ Paed

The latest design:

The EasyClean handle.

The HEINE EasyClean LED laryngoscope handle was developed to allow even simpler, faster, and safer hygienic reprocessing of the handle – no complex disassembling and assembling of batteries and light unit.

- ▶ Simple, fast, and safe reprocessing.
- ▶ Perfect view.
- ▶ Robust design.

See also [page 50](#).

Compatible with all laryngoscope blades according to ISO 7376 (Green Standard).

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



Sophisticated and unparalleled:

The classic F.O. handle.

The HEINE Standard F.O. laryngoscope handles

- ▶ In LED^{HQ} or XHL illumination.
- ▶ Can be converted from battery to rechargeable handles (Li-ion battery) – simply change the bottom insert.

Our reusable F.O. handles meet the relevant national and international standards for reprocessing.

Compatible with all laryngoscope blades according to ISO 7376 (Green Standard).



SOURCE LIST

- 1 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.
- 2 <https://practicegreenhealth.org/topics/greening-operating-room/greening-or>.
- 3 Updated in September 2020. For guarantee conditions see heine.com.
- 4 <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfmaude/search.cfm> - reference code: CCW.
- 5 McGain F, Story D, Lim T, McAlister S. Financial and environmental costs of reusable and single-use anaesthetic equipment. *Br J Anaesth*. 2017 Jun 1;118(6):862-869.
- 6 HEINE study in a representative selection of institutions in the healthcare system.
- 7 Glendale Adventist Hospital Incremental Costs of Reprocessing Reusable Laryngoscopes Blades & Handles. Carlos Vasquez.

Everything worth knowing,
ordering information,
and videos about our
laryngoscopes can also
be found here:

heine.com/laryngoscopes

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