# ELARA 900

## The slit lamp. Reinvented.

Look closer. See further.

HAAG-STREIT DIAGNOSTICS

# ELARA 900
# **See more. Work smarter. Feel better.**

As an ambitious eye care specialist, you demand superior visualization for all pathologies. You need a slit lamp that streamlines the examination workflow – while delivering outstanding comfort for both the examiner and the patient. You want a future-proof device designed to adapt to emerging trends in healthcare.

**Meet Elara 900: Haag-Streit's slit lamp for the 21st century.**

Powered by Haag-Streit's legendary Swiss-made optics, Elara 900 delivers superior clarity, contrast, and innovative illumination capabilities, ensuring that even the finest ocular details come into sharp focus. Benefit from its revolutionary projector "P-Type" light source illumination, which offers new possibilities for slit lamp examination.

Forget time-consuming manual adjustments: Elara 900 lets you customize your workflow with automated examination settings, allowing you to work with more precision and less effort. Switch seamlessly between examination modes for easy capture of videos and images and optimize efficiency with our motorized height adjustment for effortless positioning.

Slit lamp ergonomics play a crucial role in supporting your daily health and productivity. Elara 900 is designed with your comfort in mind, featuring inclined oculars for natural posture support, motorized adjustments to minimize strain, and a spacious headrest for enhanced patient comfort.

Combined, you are fully equipped to provide the best possible care – because every detail matters.

## A superior clinical view

Break free from the ordinary and embrace the remarkable. Elara 900 redefines what's possible in slit lamp microscopy. Combining legendary Haag-Streit Swiss-made optics with the revolutionary "P-Type" illumination and a dual integrated camera for an immersive 3D* experience: see with confidence across all parts of the eye.

## Enhanced efficiency

Elara 900 increases workflow efficiency, allowing you to accelerate your clinical throughput while maintaining constant patient focus. Benefit from one touch "presets" that allow you to apply examination scenarios in a single touch, apply seamless magnification and height adjustments directly from your joystick, and capture 3D* images and videos in 4K with the click of a button.

## Optimized ergonomics

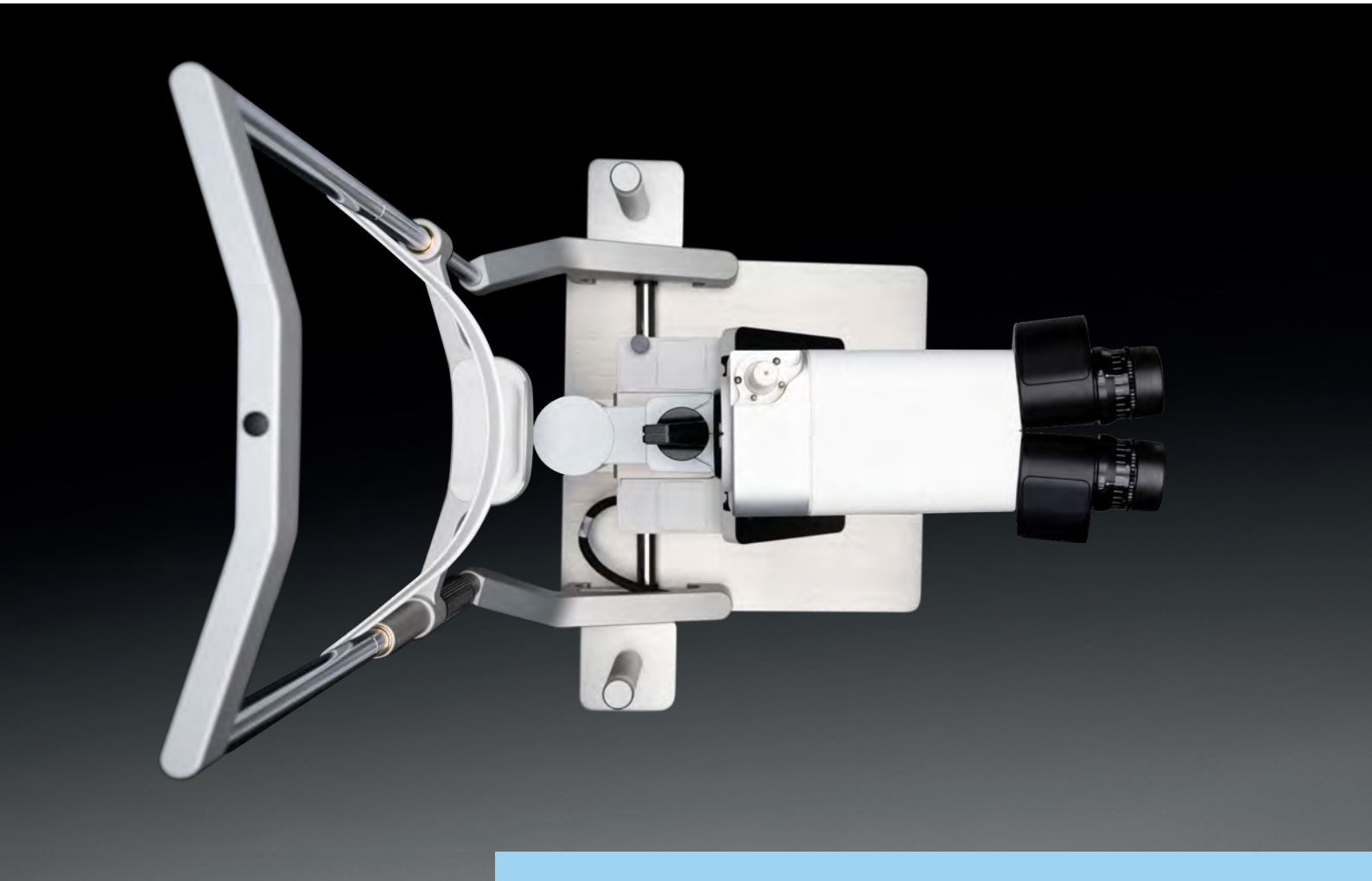
Elara 900 boasts a wealth of ergonomic features including inclined oculars, motorized height adjustment, and a spacious headrest that prioritizes patient comfort. Complemented by an intuitive touchscreen layout for optimal system operation, Elara 900 potentially minimizes physical stress, promotes better posture, and improves the examination experience for patient and eye care specialist alike.

**3D license required*

# A superior clinical view
# **See more – diagnose with confidence**

Built to withstand the most demanding slit lamp microscopy, Elara 900 is designed to provide outstanding optical performance, ensuring you can detect subtle ocular changes with ease. Featuring legendary Haag-Streit optics – your guarantee for high light transmission and optical excellence – all optics undergo rigorous inspections to ensure unrivaled quality.

Unlike modular microscopes, where interchangeable components must be balanced, Elara 900's key elements are optimized during the production process then seamlessly aligned into a single optical system. From lenses to illumination: the result is a clinical view you can trust.



LEGENDARY OPTICS, OPTIMIZED DESIGN

## A clinical view you can trust

Whether assessing the anterior or posterior segment or working under unfavorable light conditions – benefit from a view that is both natural and high in contrast. Elara 900's Galilean microscope – with its five-step magnification range from 6.3x up to 40x – unveils more detail with every turn.

Simply switch on the integrated, motorized yellow filter to increase contrast in specific areas – or select different lighting colors to optimize specific examination scenarios ("presets.")

LEGENDARY OPTICS, OPTIMIZED DESIGN

REVOLUTIONARY PROJECTOR ILLUMINATION

## The right light for every detail

Elara 900's revolutionary projector light source ("P-Type") can emit colors across the entire visible spectrum, allowing different color temperatures to be selected for individual pathologies. Offering more illumination modes than traditional LED or halogen sources, the result is a high-resolution, high-contrast examination that aids in the identification of ocular structures. Infrared* illumination enables seamless Meibomian gland assessment, further boosting your workflow.

REVOLUTIONARY PROJECTOR ILLUMINATION

HIGH-RESOLUTION 3D IMAGE & VIDEO CAPTURE

## See, save, share

Whether for follow-ups, referrals, or teaching, Elara 900's high-resolution imaging functionality preserves every ocular detail for review and comparison. The combination of the dual camera setup allows for optional 3D video and image capture in 4K for a truly immersive examination experience.

Stereoscopic visualization enhances ophthalmic education, allowing colleagues and students to experience examinations with exceptional depth and clarity.

HIGH-RESOLUTION 3D IMAGE & VIDEO CAPTURE

** Availability may vary by region – please contact your Haag-Streit Distributor for details.*

# Enhanced efficiency
# **More precision, less effort**

Enhance efficiency without compromising precision. Elara 900's digital "presets" reduce the time spent on adjusting filters, modifying slit width or illumination intensity.

These automated examination scenarios reduce manual steps and transitions, allowing you to fully focus on your examination at the touch of a button.

Working in harmony with automation settings – Elara 900 features motorized height and magnification that allow routine adjustments to take place smoothly without disrupting your examination. Additionally, high-resolution images and videos can be captured directly from the device, supporting efficient documentation and record-keeping.

POWERFUL "PRESETS"

## Streamline your workflow

Accurate settings are essential for a proper examination. Elara 900 accelerates your workflow by combining multiple manual actions into one step. Up to six individual exam scenarios – "presets" – enable you to summarize multiple manual steps into one single operation. Whether changing the illumination color, activating the yellow filter, adjusting the slit width, modifying slit width, or adjusting magnification: apply optimized settings with a single scroll of the "preset" wheel.

POWERFUL "PRESETS"

MOTORIZED HEIGHT & MAGNIFICATION

## Faster positioning, seamless adjustments

Frequent height adjustments are necessary to maintain the correct positioning when examining different ocular structures. Elara 900's motorized height adjustment speeds up this process, allowing quick and precise repositioning with minimal manual effort. This potentially reduces examination time and ensures smooth transitions, making patient assessments more efficient.

Additionally, Elara 900's motorized magnification changer enables seamless magnification adjustments directly from the joystick, delivering an uninterrupted diagnostic experience.

MOTORIZED HEIGHT & MAGNIFICATION

EFFICIENT DOCUMENTATION

## Capture & assign media to patient records

Elara 900 supports optimum patient flow in busy practices. Instantly record high-resolution images and videos with one click – then optionally assign captured content to the correct patient file, all while working within the device. For flexibility, Elara 900 can be integrated into many different environments: whether that's EyeSuite, or your EMR system which supports DICOM worklist modality*.

Together, Elara 900 reduces the need for external manual data entry and complex system navigation, minimizing administration and improving collaboration.

EFFICIENT DOCUMENTATION

*"Connectivity" license required

# Optimized ergonomics
# **Comfort for the examiner & the patient**

Long hours at the slit lamp shouldn't come at the expense of your well-being. Elara 900 redefines slit lamp ergonomics to potentially minimize physical stress, promote natural posture, and enhance ease of use. Benefit from intuitive controls that put all your settings and adjustments within easy reach, with a purpose-built joystick, intuitive touchscreen layout, and motorized height adjustment that ensures optimal system navigation and smooth operation.

Designed with the comfort of the patient, as well as the examiner in mind, Elara 900 prioritizes proper positioning, with a height-adjustable chinrest and spacious headrest to create room and reduce body pressure. The result is a comfortable yet robust examination environment for patients of all body frames.

OPTIMIZED CONTROL LAYOUT

## Everything within reach

The joystick and illumination controls are the primary touchpoints in slit lamp operation. To improve comfort and ease of use, control elements are intuitively repositioned around the joystick with a smart layout that ensures all essential adjustments can be made without shifting hand position.

Moreover, the distance from the ocular to the focus lens is reduced by 23% compared to slit lamps with a similar feature set. This reduction in the optical path length brings the patient even closer, further reducing physical strain during the examination.

OPTIMIZED CONTROL LAYOUT

OPTIMIZED VIEWING ANGLE & SMOOTHER POSITIONING

## Natural posture, less fatigue

Without adequate support, long examination sessions can cause significant discomfort. Elara 900's inclined eyepiece encourages a natural head and neck position, enabling an ergonomic and fatigue-free working posture. Plus, the large numerical aperture – favored by Haag-Streit customers – provides a bright, detailed view through large exit pupils, reducing the need for constant refocusing and contributing to a more relaxed visual experience.

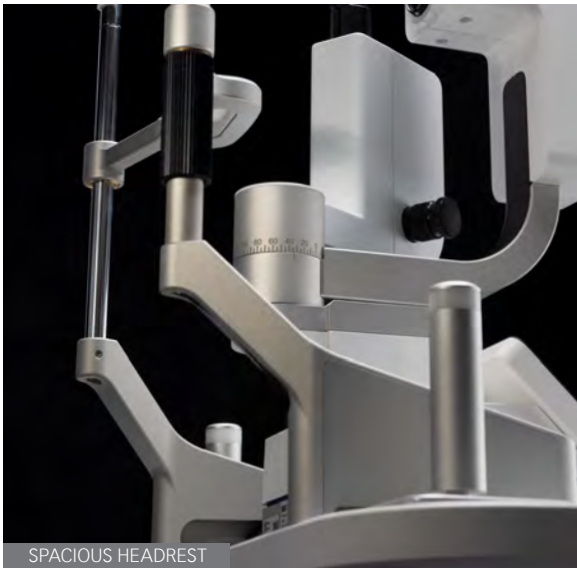
Elara 900's motorized height adjustment reduces repeated lifting movements that can strain the wrist and forearm, allowing for smoother and controlled positioning with minimal manual force. Together, Elara 900 reduces strain and supports long term comfort.

OPTIMIZED VIEWING ANGLE & SMOOTHER POSITIONING

SPACIOUS HEADREST

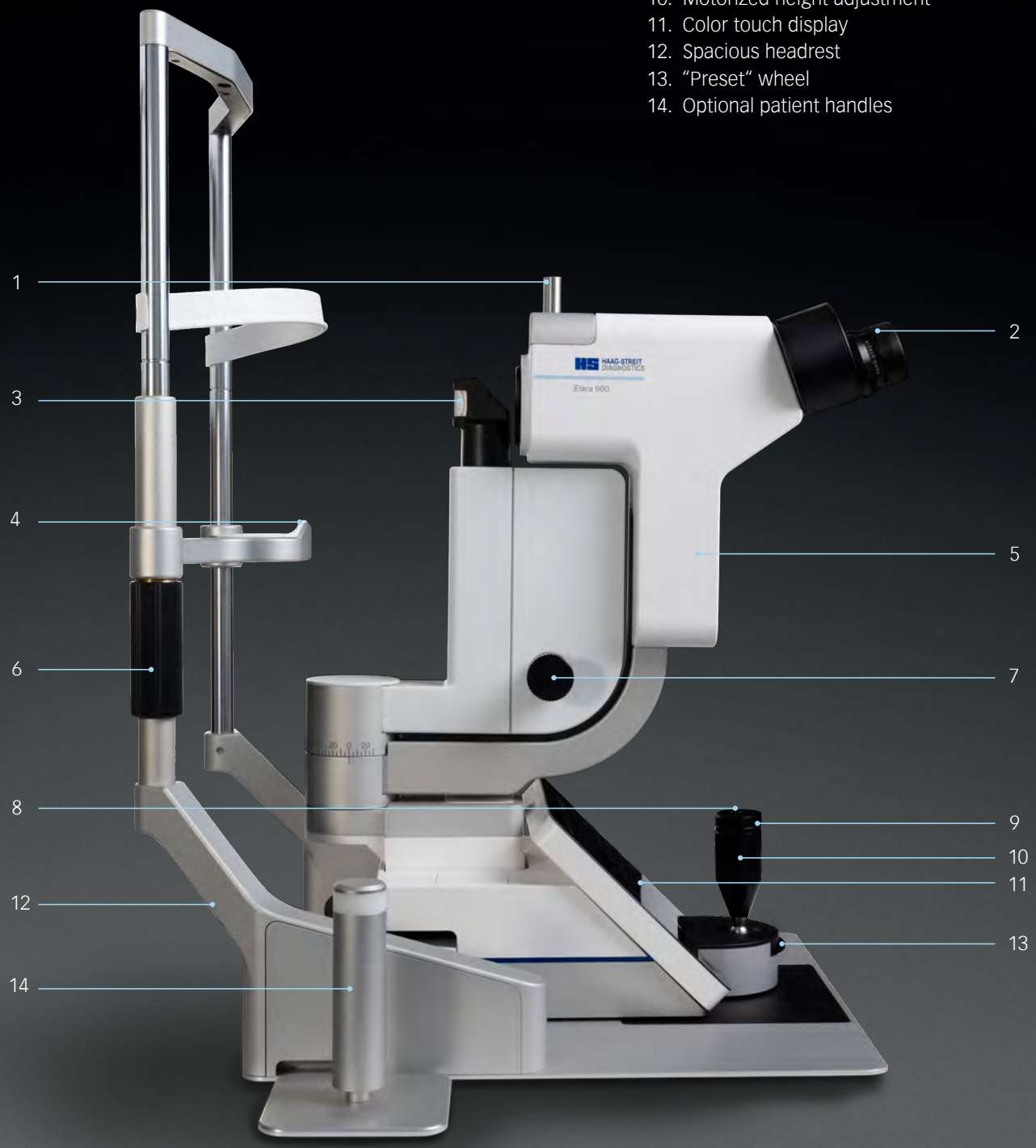
## Enhanced patient comfort

Patient positioning plays a key role in both comfort and cooperation during an exam. Elara 900's spacious headrest creates more room, reducing pressure on the upper body and improving the experience, particularly for patients with larger body frames. The result: patients remain at ease, allowing for smoother examinations, and more positive outcomes.


SPACIOUS HEADREST

# Elara 900

1. Mounting pin for Goldmann Tonometer (“R-Type“)
2. Inclined oculars
3. Revolutionary “P-Type“ illumination
4. Chinrest
5. Dual integrated camera
6. Height-adjustable chinrest
7. Illumination control elements
8. Multi-purpose joystick button
9. Motorized magnification change
10. Motorized height adjustment
11. Color touch display
12. Spacious headrest
13. “Preset“ wheel
14. Optional patient handles



# Technical specifications
# **Elara 900**

| | | |
|---|---|---|
| Illumination | Spectral range slit illumination | Visible spectrum: 420 – 660 nm<br>Infrared spectrum: 780 – 900 nm (Elara 900 only) |
| | Slit image width | 0 – 24 mm continuous |
| | Slit image height | 0 – 15 mm continuous |
| | Slit image rotatability | ± 90° |
| | Filters/colors | RGB |
| | Maximum irradiance | 174 mW/cm2 |
| Stereo microscope | Stereo angle | 13° |
| | Magnification changer | 6.3 × / 10 × / 16 × / 25 × / 40 × |
| | Eyepiece magnification | 12.5 × |
| | Adjustment range of eyepieces | +8 to –8 dioptres |
| | Pupil distance | 52 – 80 mm |
| | Total magnification | 6.3 × / 10 × / 16 × / 25 × / 40 × |
| | Object field ø in mm | 32.0 / 20.0 / 12.7 / 8.0 / 5.1 |
| | Eyepiece inclination angle | 20° |
| Camera | Camera resolution | 2 × 5 megapixel for stereoscopic view with up to 4K video and image output in stereo mode |
| | Camera beam | Can be defined in the software: Stereo, left or right. |
| | Frame rate | 30 fps (frames per second) |
| | Automatic flip mirror | 0% / 70% (transmission to camera) |
| | Image file format | jpg / bmp |
| | Image file compression | **Format** / **File size**<br>bmp lossless / ~ 15 MByte<br>jpeg high / ~ 4.5 MByte<br>jpeg med / ~ 0.5 MByte<br>jpeg low / ~ 0.3 MByte |
| | Video file format | mp4 |
| | Video file compression | **Format** / **File size (1 min)**<br>low mono / 22.5 MByte<br>low stereo / 45.0 MByte<br>med mono / 37.5 MByte<br>med stereo / 75.0 MByte<br>high mono / 75.0 MByte<br>high stereo / 150.0 MByte |
| Instrument base | Operation | Single-handed operation of control lever in three dimensions |
| | Adjustment of instrument base | 100 mm (length), 100 mm (side), 30 mm (height) |
| Wireless communication | Module | Intel Wireless-AC 9260 |
| | Frequency | 2.4 GHz (2.400 GHz to 2.483 GHz)<br>The range may vary depending on the country |
| | Power | 20 dBm (100 mW) |
| Power supply | Type | CINCON Electronics Co. Ltd |
| | Model | TR160MA240-01-12E746 V |
| | Mains voltage | 100 – 240 VAC |
| | Current consumption | 159 VA |
| | Operating frequency | 47 – 63 Hz |
| Dimensions (L × W × H) | | 560 mm × 401 mm × 330 mm |
| Weight | | 15.2 kg |

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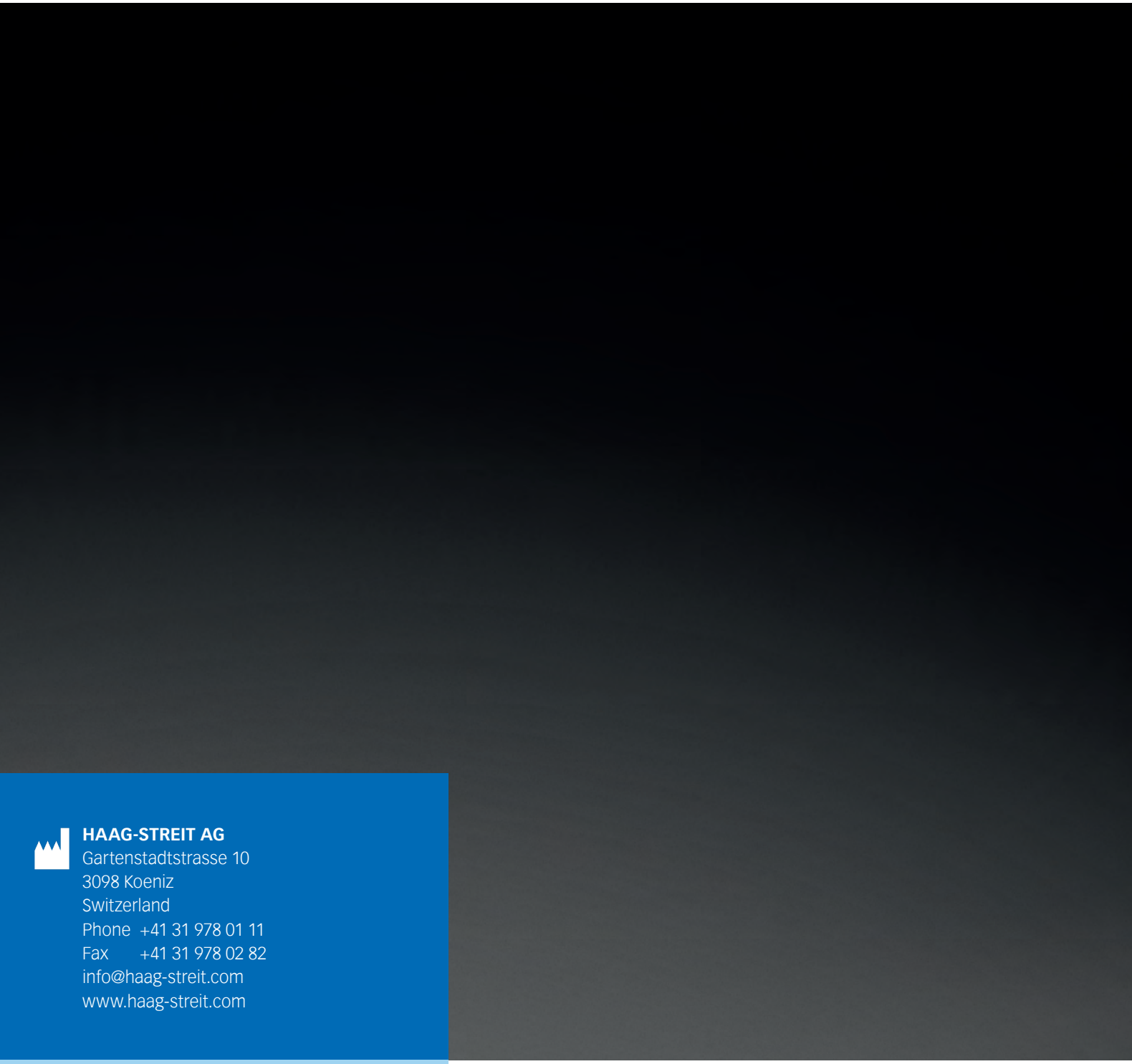

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