

DEKA
Innate Ability

THE NEW PLATFORM

HELIX

**10600 nm + 1570 nm Ablative
and Non-Ablative Laser
Technology for Total
Dermatological Procedures**

Expertly Customized Fractional
Ablative & Non-Ablative Treatments

HELIX stands out in **Aesthetics** and **Dermatology**



HELIX

EVOLVING EXCELLENCE

COOLPEEL

HYPERTROPHIC AND
ATROPHIC SCARS

PERIOCLAR
TREATMENT

EYELIDE PRO
PROCEDURE

DEEP SCARS

DERMATOLOGICAL
SURGERY



THE SCIENCE BEHIND

HELIX

The Revolutionary Dual Wavelength Technology

DEKA, which has been a benchmark in technological innovation for decades, has developed HELIX, an advanced laser system that combines two wavelengths: 10600 nm (ablative) and 1570 nm (non-ablative).

HELIX enables modulation of the treatment according to the patient's specific clinical needs, allowing both facial and body applications through targeted stimulation of dermal regenerative processes and deep neocollagenesis. The 10600 nm and 1570 nm wavelengths, used either individually or synergistically, do not simply combine two technologies; rather, they allow for the design of a coherent, tridimensional, and progressive treatment protocol, ensuring excellent clinical outcomes with reduced downtime.

Why Choosing HELIX:

Unmatched Power and Versatility

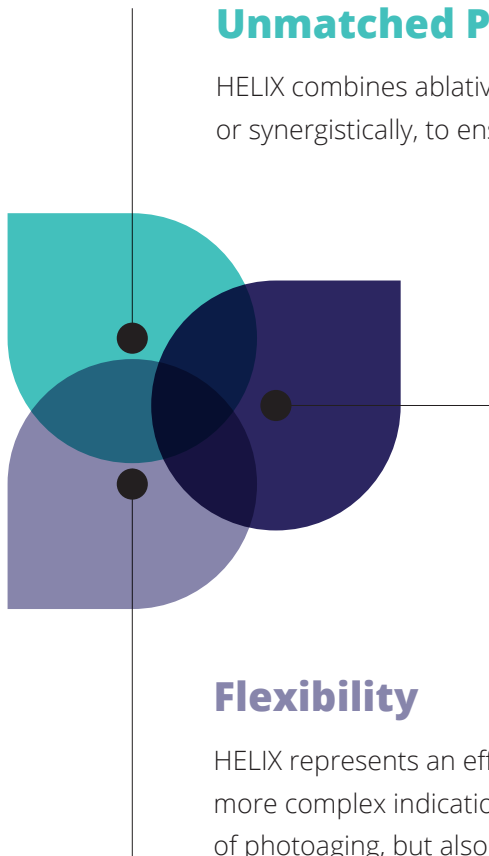
HELIX combines ablative and non-ablative technologies, used alone or synergistically, to ensure unmatched treatment versatility.

Total Control and Maximum Efficacy

The laser source, featuring exclusive PSD® technology, SmartStack, and Scattered Modality, achieves unprecedented levels of efficacy and safety.

Flexibility

HELIX represents an effective solution not only for the management of more complex indications such as scars, skin laxity, dyschromia, and signs of photoaging, but also for the long-term maintenance of skin quality.



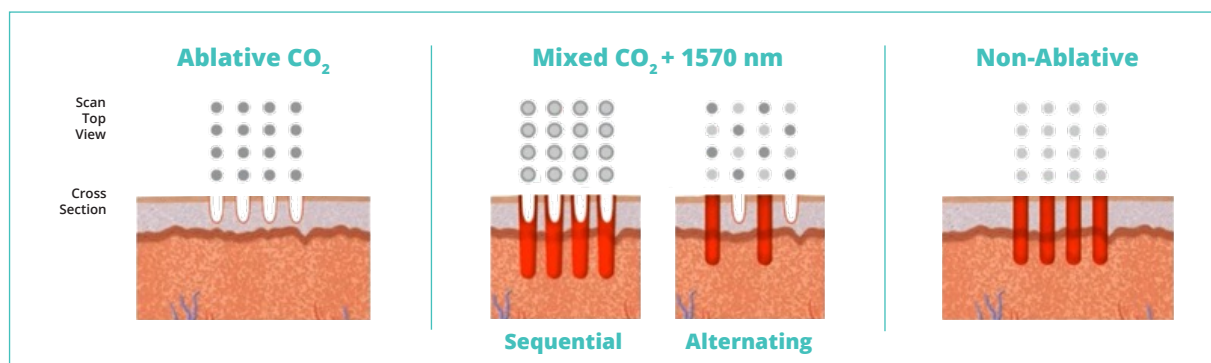
THE SCIENCE BEHIND

CO₂+1570 nm: The ideal Combination for Real Results

DEKA has designed and developed the HELIX laser system, which combines two wavelengths: ablative CO₂ and 1570 nm non-ablative, creating a synergistic effect that enhances therapeutic outcomes. The careful selection of wavelengths synergistically optimizes tissue-level therapeutic effects.

Depending on the specific clinical case and through parameter customization, the operator can treat various imperfections using either the CO₂ wavelength alone or the 1570 nm wavelength alone, or choose sequential emission (MIXING Mode) CO₂ followed by 1570 nm or 1570 nm followed by CO₂ thereby enhancing both tissue tightening, due to a greater shrinkage effect (for wrinkles), and biostimulation through an increased volumetric thermal effect (in the remodeling of atrophic scars).

Low ablation densities help reduce downtime, allowing for a rapid return to daily activities.



PSD® Technology: Maximum Efficacy, Precision and Total Control

PSD® (Pulse Shape Design) technology makes possible the selection of multiple pulse modalities, allowing selective management of vaporization depth and thermal effect in both freehand and fractional scanning modes. By varying the pulse modality SP (SmartPulse), DP (DEKAPulse), and HP (HighPulse) clinicians can achieve different ablation and stimulation effects tailored to specific clinical needs. This flexibility ensures optimal solutions for a wide range of skin resurfacing and surgical treatments. With SP, DP, and HP, practitioners always have the most appropriate option to meet each patient's individual requirements.



SmartPulse (SP)



DEKAPulse (DP)



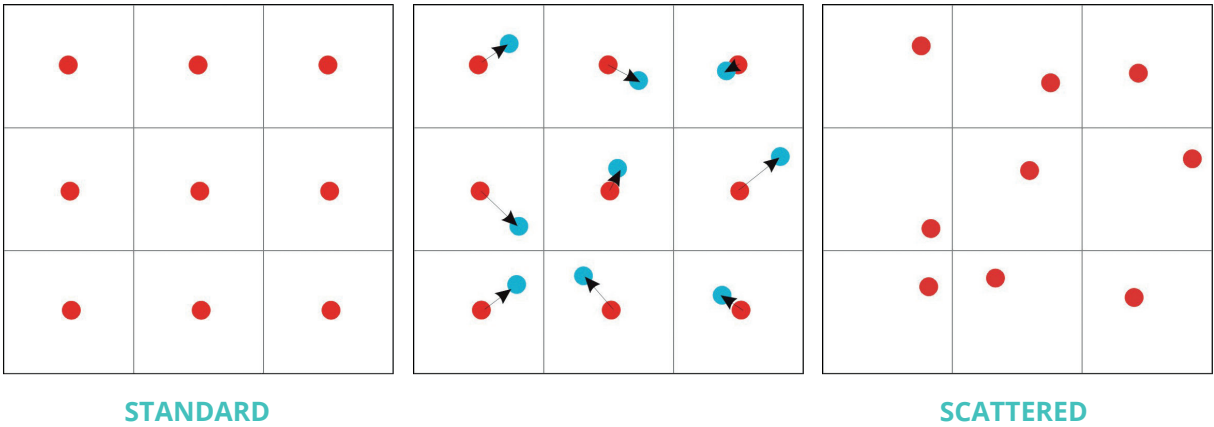
**HighPulse (HP)
/ UltraPulse (UP)**

THE SCIENCE BEHIND

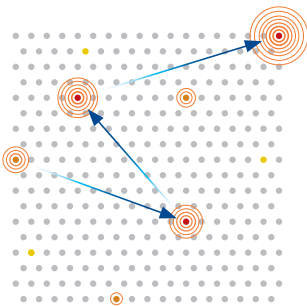
Smart Scanning Modality

Scattered Modality

Scattered Modality ensures uniform scanning across the entire treatment area, with a gradual fade along the edges to prevent DOT overlap. This approach enhances treatment homogeneity between the scanned area and the surrounding skin texture. Scattered Modality delivers uniform, homogeneous skin stimulation, promoting smoother skin texture and more natural aesthetic outcomes.



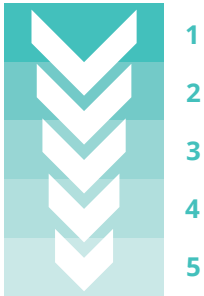
smart·TRACK



SmartTrack is the algorithm specially developed to optimize the scanning pattern, minimizing localized temperature increases.

SmartStack

SmartStack technology offers five adjustable levels for precise control of vaporization depth. Increasing SmartStack levels progressively enhance tissue shrinkage, optimizing clinical efficacy while maintaining a high-safety profile and minimizing recovery time.



THE SCIENCE BEHIND

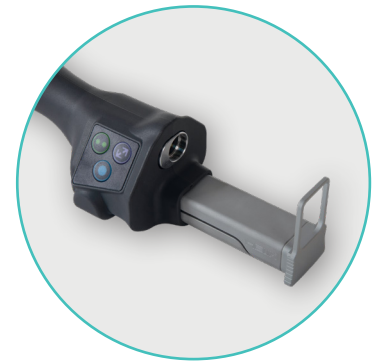
Set up Complete with Scanning Systems

In ablative and non-ablative laser treatments, scanning systems play a critical role in defining the quality of the interaction between laser energy and cutaneous tissue. In addition to the characteristics of the laser source itself, the modality of energy delivery across the target surface significantly influences treatment uniformity, depth of action, and clinical safety. The scanning systems used with Helix are designed to ensure controlled and reproducible energy distribution while minimizing the risk of pulse overlap. The scanning modality enables the treated area to be subdivided into micro-areas according to predefined patterns, allowing precise control over delivered energy density and the ratio between treated zones and surrounding intact tissue.

MATRIX DOT

Scanning system featuring an integrated contact skin cooling system and a scan area of up to 20×20 mm. Adjustable parameters accessible directly via the control buttons (scan size, stretch, and scan shape) allow the physician to customize treatment according to specific clinical indications and the patient's skin characteristics.

SCANNING SHAPES:



SCAR3 PRO

Scanning system designed to minimize the risk of post-treatment hyperpigmentation and hypopigmentation. Thanks to its reduced spot size, it enables greater penetration depth while operating at lower energy levels.

SCANNING SHAPES:



DERMASCAN

This solution, when combined with handpieces featuring 4" and 7" focus, allows the use of scanning patterns for ultra-fast tridimensional ablation, with maximum control and precision in treatment delivery.

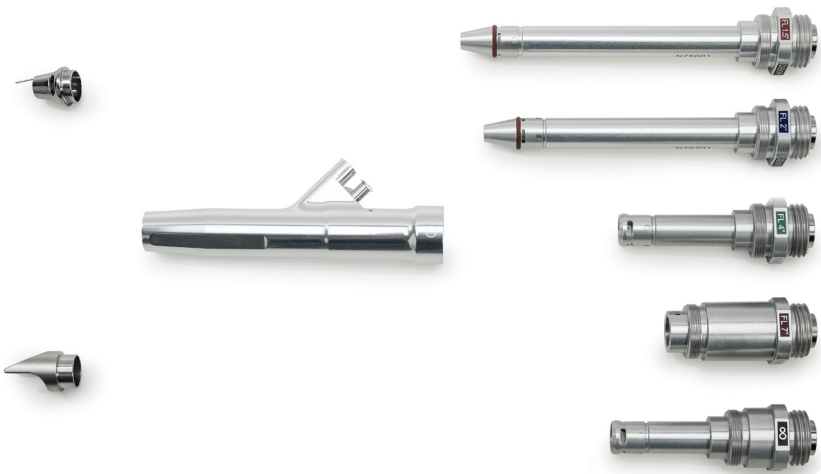
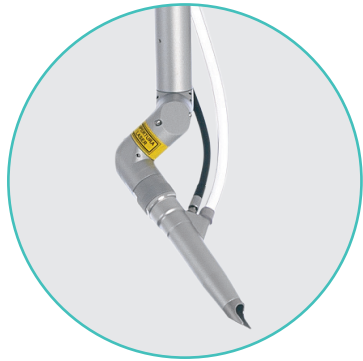
SCANNING SHAPES:





Special Handpieces

HELIX offers a wide range of handpieces equipped with different focusing lenses, spacers, and mirrors. All handpieces deliver, through a dedicated air inlet, an airflow that prevents dust or particle deposition on the lenses. The handpieces are also equipped with an integrated smoke evacuation channel.



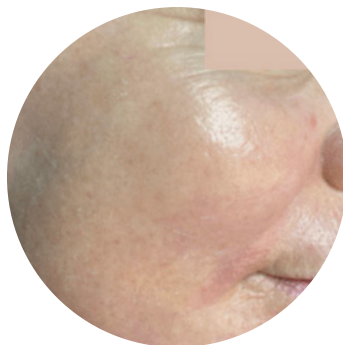
Clinical Results



Courtesy of
Zen Spa



Courtesy of
Allure Infinite Beauty



Courtesy of
Karma Beauty and Wellness



The Floor to Practitioners

“HELIX is a skin resurfacing dream. I can now mix ablative and non-ablative modalities for extraordinary results, fast, on one efficient platform, and with less downtime than ever before.”

Mark Halsey M.D.

Dermatologist, South Fork - USA

“HELIX gives a full range of options to address issues from superficial wrinkles to deep scars. We can treat a variety of skin elasticity and color effectively, while managing patient comfort and downtime.”

Rachel Walker M.D.

Plastic Surgery Center of Dallas

THE PERFECT MATCH

Helix Strength

- Capacity to target different skin layers in a selective and synergistic way.
- Fractional ablative and non-ablative technology powered by **60 W, with extensive worldwide clinical use.**
- DEKA's exclusive **Pulse Shape Design (PSD®)** offers full control of CO₂ duration, energy, and pulse shapes, including **HighPulse** and **DEKAPulse**.
- Multiple scanning patterns, **modes, shapes, densities,** with treatment areas up to **20 × 20 mm.**
- **Innovative Scattered Modality** minimizes pattern overlap while maximizing **treatment speed.**
- Integrated skin-contact cooling system to enhance patient comfort.
- No consumables.



Only for DEKA Users:

A great support in medical practice

DEKA Club

**MATRIX DOT,
SCAR3 PRO, DERMASCAN**

**Broad Range
of Handpieces**

**SmartTrack and
Scattered Mode**

Skin Cooler

**Interactive GUI
(15,6" Rotating Touch
Screen Display)**

PSD® Technology

10600 nm and 1570 nm



Scan and see
HELIX in action

Technical Specifications

HELIX	
CO₂ Laser	
Laser Type	CO ₂ - RF - PSD
Wavelength	10,6 µm
Laser Emission Mode	TEM ₀₀
Emission Modes	CW - SP - DP - HP - UP
Average Power at Handpiece Output	From 0.1 W to 60 W
Er:Glass	
Wavelength	1570 nm
Laser Emission Mode	Circular multimode
Power	From 2 W to 12 W
General Features	
Internal Database	More than 100 factory stored protocols, upgradeable with USB. Possibility for the user to store a number unlimited custom protocols
Control Panel	Color LCD Touch Screen
Dimensions and Weight	138* (H) x 58 (W) X 55 (D) cm - 70 Kg *with folded articulated arm
Electrical Requirements	100-230 Vac - 50/60Hz - 1500VA

DANGER - Visible and invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation. Class 4 laser product.

This brochure is not intended for the US market.



HELIX



Dealer stamp



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DEKA Innate Ability

A spin-off of the El.En. Group, DEKA is a world-class leader in the design and manufacture of lasers and light sources for applications in the medical field. DEKA markets its devices in more than 120 countries throughout an extensive network of international distributors as well as direct offices in Italy, France, Japan and USA. Excellence is the hallmark of DEKA's experience and recognition garnered in the sphere of R&D in over thirty years of activity. Quality, innovation and technological excellence place DEKA and its products in a unique and distinguished position in the global arena. DEKA produces laser devices in accordance with the specifications of Regulation 2017/745/EU and according to the ISO 9001 and ISO 13485 quality system.