

Technical Specification



Laser Medium	CO ₂ (Glass Tube)
Wavelength	10,600 nm
Guide Beam	650 nm < 5 mW
Power	1-40 W
Aiming Beam	Diode 650 nm
Cooling	Water
Dimension (W*L*H)	440 mm (W) X 480 mm (L) X 1055 mm (H)
Weight	52 Kg

Handpieces	50 mm / 100 mm (standard), Dental / ENT (optional)
Operation Mode	CW / Normal Pulse / Super Pulse / Super Pulse Continuous / Ultra Pulse / Smart Protocol (General Surgery / Dental Surgery)
Pulse Duration	Continuous: 2-30 ms / Ultra Pulse: 90-900 µs / Super Pulse: 1.0-4.0 ms / Normal Pulse: 5-20 ms
Repeat Time	Off, 2/500 ms adjustable, 5 ms, 10 ms, 30 ms, 50 ms, 70 ms, 100 ms, 250 ms, 500 ms

Beam Mode	Ultra Pulse
Density Level	1-23 steps (x, y, line); 9-4489 dots
Operation Mode	Fractional Mode / Low Pain Fractional Mode
Beam Pattern	Array, Grid, Random
Beam Size	2x2 – 20x20 mm
Beam Shape	Square, Triangle, Octagon, Circle
Depth Level	1-5 steps
Handpiece	Fractional HP (galvanic motor) / Vaginal Rejuvenation HP (optional)
Repeat Time	Off, 0.5, 1, 1.5, 2, 2.5 ms

SMAXEL

Fractional CO₂ Laser



SMAXEL, the pinnacle of CO₂ fractional laser technology by IDS, is a groundbreaking system designed to address a diverse range of concerns.

With its innovative approach and precision engineering, SMAXEL redefines the landscape of mainly 6 different aesthetic and medical applications, offering unparalleled efficacy and versatility—
aesthetic surgical, aesthetic fractional, general fractional, vaginal, dental, and ENT.

For each application, SMAXEL is equipped with features that optimize treatment outcomes, and its prowess lies in its ability to minimize downtime while maximizing results. SMAXEL is truly a go-to choice for aesthetic and medical practitioners.

Handpieces for Various Treatment Categories

Aesthetic Surgical



Aesthetic Fractional



General Surgical



Dental



Vaginal



ENT



Indication

Aesthetic surgical

- Corn
- Warts
- Syringoma
- Etc.

Aesthetic fractional

- Acne Scar
- Wrinkle, Large Pore
- Skin Resurfacing
- Stretch Mark, Skin Tightening
- Laser Peeling, Age Spot
- Etc.

General surgical

- Excision, Incision
- Phimosiectomy
- Tumor Elimination
- Hemorrhoids
- Etc.

Dental

- Implants Operation
- Hypersensitivity
- Hemostasis
- Sterilization in Root Canal
- Etc.

Vaginal

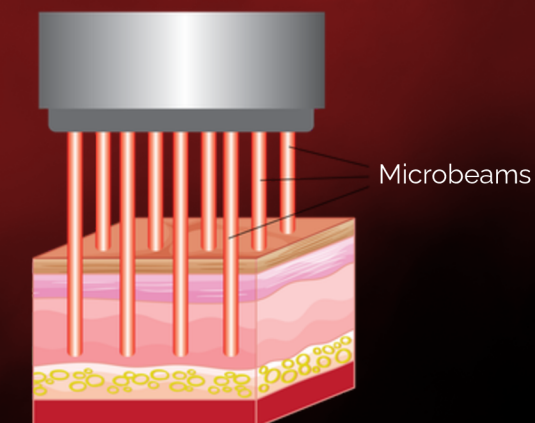
- Pudenda
- Genitourinary Syndrome of Menopause
- Vaginal Rejuvenation
- Vaginal Atrophy
- Stress Urinary Incontinence

ENT

- Allergic Rhinitis
- Snoring

Scar Treatment by Fractional CO₂ Laser

The fractional CO₂ laser emits a concentrated beam of light that is fractionated into thousands of tiny microbeams. These microbeams penetrate into the deep skin, creating controlled columns of both vaporized and coagulated zones that stimulate the production of new collagen and elastin fibers. As a result, the damaged skin cells are replaced by new, healthier tissue, and eventually appearance of scars is improved over time.



Vaginal Rejuvenation by Fractional CO₂ Laser

Similar to scar treatment, the fractional CO₂ laser treatments for vaginal rejuvenation utilize a similar principle, but the target and effects are specific to the vaginal tissue. The fractional CO₂ laser emits a concentrated beam of light that is fractionated into thousands of tiny microbeams. These microbeams penetrate into vaginal tissues, creating controlled columns of both vaporized and coagulated zones that trigger a healing process in the tissue, stimulating the production of new collagen, elastin fibers, and vascularization in the vaginal wall. This results in enhancing the strength and elasticity of the vaginal tissue, eventually leading to improvements in vaginal laxity, elasticity, and moisture levels. Over the weeks following the treatment, patients may notice improvements in vaginal tightness, lubrication, and overall tissue health.

