Pixel CO_2

Fractional Ablative CO_2 Laser

System Brochure

Skin Rejuvenation

Aesthetic Surgery

Scars

Melasma

iTED

Alma Lasers™

Wellbeing Through Technology

at offers multiple treatment applications via a wide array of handpieces and scanners.

Pixel CO_2 - Perform at a Higher Level

The high power Pixel CO_2 fractional ablative laser offers faster treatm
capabilities, reduced patient downtime and unmatched versatility.

Maximum Results

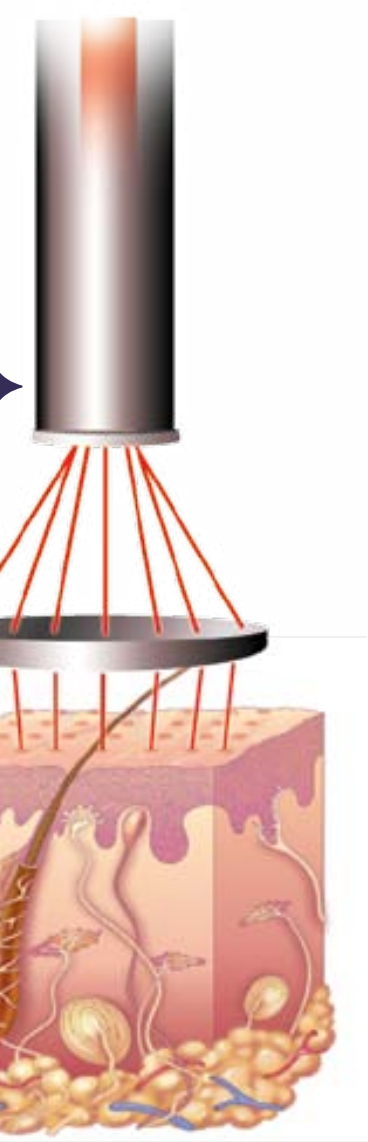
Alma Lasers' CO_2 is a high powered laser that brings unparalleled pre
to the medical aesthetic field. Supporting the most advanced assortme
and surgical tools, Alma's Pixel CO_2 opens the door to new possibi
surgical care.

With over a decade of proven leadership in laser technology, Alma
dictating the new standard in precision and innovation.

Pixel CO_2 Advantages

- **iTED** - Trans epidermal delivery of cosmecuticals with IMPACT ac
  improve results and reduce downtime.

  Resurfacing & Tightening- HIGH mode high peak power pulses
  for stronger thermal effect.
- **Less Downtime** - Fractional technology causes less tissue
  downtime.
- **Faster Treatment** - Treat a whole face in 5-10 minutes.
- **Options** - Pixel CO_2 comes with a wide array of advanced sca
  surgical tools.
- **System Endurance** - Pixel CO2 uses a Coherent RF-excited t



CO_2 roller for fast fractional ablation

Fractional ablation results in less edema and downtime

Fractional Ablative Technology

The Pixel CO_2 laser penetrates the skin with 10.6 um thermal microchannels, crea
and thermal effect – without disturbing the surrounding tissue. These micro-in
results and jumpstart the healing process by stimulating collagen strengthening

Fractionation Devices

Alma offers a variety of unique scanners and applicators which offer advanta
lasers. The Pixel CO_2 applies the laser energy through holographic lenses w
to 7, 49 or 81 microscopic beams or pixels. This results in the creation of
microscopic columns of thermal damage that penetrate deep into the dermis
the growth of new collagen.

Roller

The Pixel CO2 roller is a manual and passive applicator that is rolled across th
laser pattern.

Scanner

LiteScan is the industry's most advanced laser scanner, allowing char-free fracti
sizes and patterns.

Stamping

Traditional 7X7 and 9X9 stamping is also available on the versatile PixelCO2 sy

Reduced Risk

The high powered Pixel CO_2 can control and reduce the risks of delayed hypo
post-inflammatory hyperpigmentation, infection and persistent erythema.

used during a Platelet-rich plasma procedure.

Taimur Shoaib, MD Plastic Surgeon, Edinburgh, UK

Advanced Tips & Applicators

Pixel CO_2 has the widest selection of accessory handpieces, allowi
indications with greater clinical results.

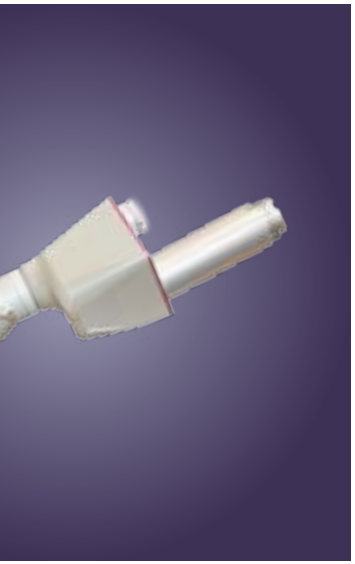
CO_2 Fractional Roller

The CO_2 Roller rests on two wheels which glide across the skin, trigge
that is channeled into a horizontal line of seven evenly spaced laser sp
the wheels trigger the laser, a symmetrical track of high thermal fractio
regardless of treatment speed.

Power

Compared to passive fractional applicators with a 7X7 or 9X9 laser s
delivers up to 10 times more energy per laser spot. The added streng
deeper penetration with shorter pulse duration; improving treatment resu
patient downtime.

Number of Pixels	7 per row
Spot Width	1.1 mm
Pattern	Additive
Treatment Area	XY ~1 cm width passes
Beam Delivery	Direct
Maximum Pulse Energy	2500mJ/Pulse
Maximum Pixel Energy	350 mJ/Pixel



IMPACT

Surgical

LiteScan

LiteScan is the most advanced CO_2 scanner available today, offering char-free tissue ab
with multiple scanning patterns.

- Vaporization layer-by-layer
- Ease-of-use
- Versatility
- Precision
- Control
- Performance
- Penetration depth
- Adjustable patterns

Continuous Variable Defocus (CVD)

Alma offers the only CO_2 CVD tip. The CVD can change the focus of the laser spot fr
a single tip, it is not possible to manipulate the beam strength during treatment.

IMPACT

The IMPACT module opens up new treatment possibilities by enhancing the deliv
to the deeper skin tissue. IMPACT is a sonotrode that releases acoustic waves a
advance cosmeceuticals through micro-channels (created by the fractional ablative C
creating a push and pull effect within the channels to release the buildup of inter-cellu
cosmeceuticals to the targeted tissue depth.

Surgical

Alma Lasers offers a wide variety of 3rd party micromanipulators and access dev
Surgical hand pieces and scanners. This versatility makes Alma Lasers the leading cho
laparoscopy, gynecology, proctology and 60 other surgical applications.

Combination Therapies

With the Pixel CO_2, you can treat a wide variety of skin conditions. But when treatin
melasma, stretch marks or skin rejuvenation, PixelCO_2 allows you to perform i
advanced technique for trans-epidermal delivery.

iTED is a minimally invasive skin barrier breakthrough solution that offers unpre
skin repair and aesthetic enhancement. It is the synergy of multiple technologie
provide patients with a quick, easy and virtually pain-free answer to their most di

iTED begins with microperforation of the skin using the fractional ablative
application of advanced cosmeceutical compounds chosen per skin condition
then emits acoustic pressure that forces the active ingredients in the cosmeceut
sub-epidermal tissue for effective skin repair and improvement.

Clinical Studies

iTED with the Pixel CO2 has been the subject of numerous clinical studies, all of
technique to improve clinical results and cause fewer side effects and downtime.

Combining laser and ultrasound technologies to deliver platelet-rich plasma

Taimur Shoaib, Consultant Plastic Surgeon,Glasgow, UK

**Treatment of Striae Distensae Combined Enhanced Penetration Platelet-Ri
Plasma and Ultrasound after Plasma Fractional Radiofrequency**

Dong-Hye Suh, Dermatologist, Seoul, Korea

**Topical delivery of Triamcinolone via skin pretreated with ablative radiofrequenc
a new method in hypertrophic scar treatment**

Maria C. A. Issa, Dermatologist, Rio de Janeiro, Brazil

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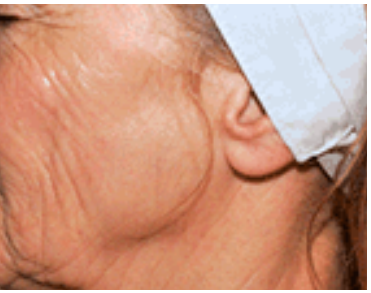
After

nal Ablation

rtesy: Dr. Irene Bermejo, Argentina



After

nal Ablation

rtesy: Dr. Irene Bermejo, Argentina

After

nal Ablation

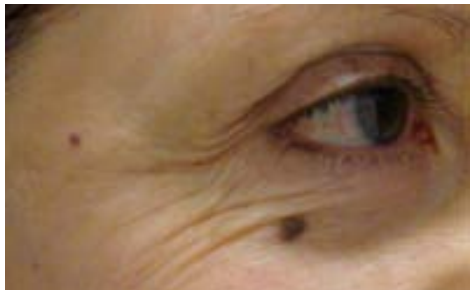
rtesy: Dr. Irene Bermejo, Argentina

Before

Fractional Ablation

Photos courtesy: Dr. Irene Bermejo, Argentina

After



Before

Fractional Ablation

Photos courtesy: Dra. Patricia Gutierrez, Mexico

After

Before

After

Fractional Ablation

Photos courtesy: Dr. Michael Shochat

e Experts

Michael Gold, MD

Medical Director, Gold Skin Care, Nashville TN

“Pre-clinical and clinical results have demonstrated that the IMPACT technology with cosmetic products enhances the delivery of topical creams and lotions in a variety of skin imperfections.“

Michael Shochat, MD

Dermatologist

“The iPixel CO_2 is brilliant; it is a must have device for all dermatologists and plastic surgeons.”

Taimur Shoaib, MD

Plastic Surgeon, Edinburgh, UK

“These non-invasive treatments are the future and as technology improves, so do the results.”

Maria Claudia Issa, MD

Professor of Dermatology, Rio de Janeiro, Brazil

“iTED can also be used to eliminate some disadvantages such as needles discomfort and irregularity of drug distribution in the lesion to be treated, minimizing collateral effects, typical to conventional treatment.”

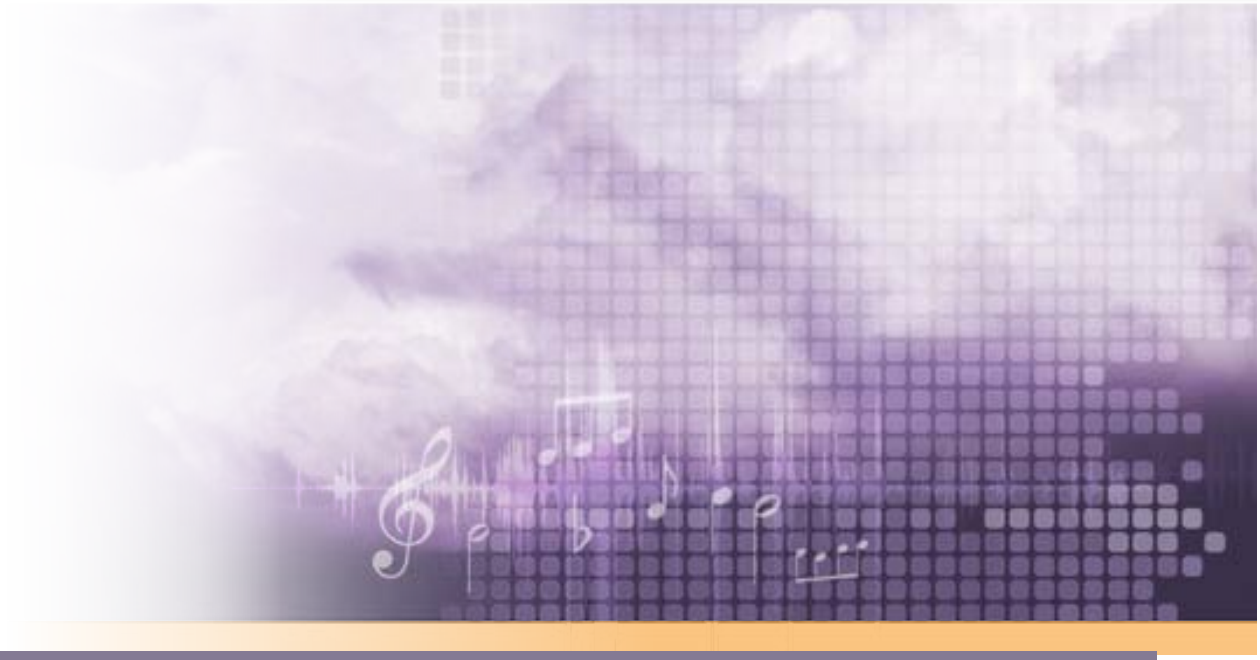
Tania Meneghel, MD

Dermatologist, Brazil

“Pixel CO_2 with the iPixel handpiece is an unbeatable combination when treating scars and stretch marks.”

Maria Angelo-Khattar, PhD

Alma Lasers is the leading supplier of innovative medical aesthetic technologies. Alma Lasers is recognized by industry practitioners for its whole-hearted commitment to providing complete solutions to professional practices. Alma Lasers offers innovative technologies, dependable equipment, knowledgeable sales staff and years of industry expertise. We seek the creation of a strong and lasting relationship with our doctors and aesthetic clinics based on trust and a genuine desire for the success of the practice.



System Specifications

Laser Type RF-excited CO_2 laser	100-120 VAC, 20A, 50/60 Hz 220-240 VAC, 10A, 50/60 Hz
Wavelength	10.6 µm
Operational Mode	CW, Super Pulse
Laser Output Power	40 / 70 Watts CO_2 source from Coherent Inc.
Electrical	120 VAC, 16 A, 50/60 Hz or 230 VAC, 8 A, 50/60 Hz
Dimensions	(HxWxD) 52" x 17" x 21" (132 cm x 43 cm x 53 cm)
Weight	135 lbs. (61 kg)

Alma Lasers®
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