



# CoolPeel

A new advance in CO<sub>2</sub> laser treatment

US DERMATOLOGIST DR EMIL TANGHETTI SAYS COOLPEEL LASER TREATMENT OFFERS THE SKIN REJUVENATION RESULTS OF TRADITIONAL LASER RESURFACING WITH SIGNIFICANTLY LESS DISCOMFORT AND DOWNTIME.



Dr Emil Tanghetti

**C**oolPeel is a new treatment that has virtually eliminated discomfort associated with fractional CO<sub>2</sub> laser and reduced the downtime to as little as one day. The CoolPeel laser treatment uses the SmartXide Punto laser, the latest and most advanced CO<sub>2</sub> laser from leading laser company, DEKA.

The SmartXide Punto is designed to deliver high peak power in extremely short pulses at low energy settings. The super-short pulse creates controlled injury to the epidermis and superficial dermis with less heat build-up in the skin, offering an optimal level of ablation with minimal thermal damage to

surrounding tissue. This allows for faster recovery and downtime than with most ablative lasers.

'DEKA is the leading CO<sub>2</sub> laser technology company in the world and I believe the best in the business at making a CO<sub>2</sub> laser,' says US dermatologist Dr Emil Tanghetti.

'The impetus behind CoolPeel was to adapt DEKA's proprietary technology and create a high peak power with lower energy in order to offer a minimally-invasive, minimal downtime procedure that results in rejuvenation – and CoolPeel has certainly delivered on this vision,' he adds.

CoolPeel's unique advantages have been made possible by DEKA's advanced laser emission technology and unique pulse-shape design (PSD). The laser also has a proprietary spray emission that creates a natural-looking, random pattern on the skin rather than the traditional square grid pattern that many fractional lasers produce.

CoolPeel treatments are comfortable and well tolerated by patients, with most not requiring topical anaesthetic. It is also fast – a full face takes as little as 5-10 minutes.

## THE COOLPEEL DIFFERENCE

'If you look at the market today, more patients are wanting skin rejuvenation without the downtime,' says Dr Tanghetti. 'This leads us to find procedures that have little to no downtime which can be performed in a series to gradually result in skin rejuvenation. This is what patients want: effective procedures where they can keep active and don't need to take off one to two weeks from work or shut off from society.'

'In order to do this, you need a technology that can deliver energy in a very rapid way, that confines the heat to a small thermal zone and causes damage that's easily repaired within a few hours – and that's quite literally what CoolPeel does.'

CoolPeel leverages SmartXide Punto's exclusive H-pulse – a high peak power, low energy, short pulse that delivers an ablative treatment with modest thermal damage to the surrounding tissue.

'Controlled thermal damage means that downtime is minimised while impressive skin resurfacing results are delivered. A full-face treatment can be performed in 5-10 minutes, with minimal discomfort to

the patient and they can go back to work the next day with makeup,' says Dr Tanghetti.

'With CoolPeel, we are using much lower energy, but it's achieving comparable results to other more aggressive treatments. The other advantage is less pain and discomfort during treatment; most patients don't need topical anesthesia at all.'

## DERMAL REMODELLING VIA SUPERFICIAL WOUNDING

CoolPeel's H-mode delivers epidermal ablation to cause controlled thermal wounding just below the epidermis and into the superficial papillary dermis.

'When you ablate or damage the epidermis, cytokines and chemokines are released which directs a repair response from which new collagen and elastin is formed. You don't necessarily have to drill down further to see new collagen formation, as keratinocytes and cytokines are often generated by epidermal injury,' says Dr Tanghetti.

'There has been a lack of understanding about epidermal wounding and I think part of this stemmed from a "more is better, deeper is better" viewpoint, without a firm basis that deeper dermal injury is necessary. It has been found that a purely epidermal injury results in production of Type III collagen, elastin, mucin and other proteins – so even a superficial treatment can result in significant dermal remodelling, without taking weeks to heal like a deeper wound.'

'Three to four treatments, with minimal downtime, spaced four weeks apart can achieve optimal skin resurfacing results.'

## CoolPeel key features

- Low downtime (as little as 24 hours)
- Minimal discomfort (topical anesthesia typically not required)
- Unique pulse shape emission selection via PSD (Pulse Shape Design) technology allows for tailoring of results and downtime
- Ability to perform broad range of treatments, including photo damage, scarring, pigmentation and deep wrinkles
- Fast treatment – full face takes 5-10 mins
- User-friendly adjustment of all parameters (power, dwell time, pulse and scanning mode)
- Reliability and control with minimum thermal damage and optimal recovery time
- Can be used on all skin types
- Ability to use in combination with other technologies such as microneedling
- No consumables; reduced operating cost

“WITH COOLPEEL,  
WE ARE USING MUCH  
LOWER ENERGY,  
BUT IT'S ACHIEVING  
COMPARABLE RESULTS TO  
OTHER MORE AGGRESSIVE  
TREATMENTS.”



### VERSATILITY & CUSTOMISATION

DEKA's SmartXide Punto gives practitioners the ability to tailor the laser power and pulse size to the patient. The laser offers ablative, fractionally-ablative and surgical modes, in addition to its unique high-peak power, low-energy H-pulse CoolPeel mode.

'SmartXide's advanced engineering offers low downtime or traditional high downtime treatment – giving us more flexibility to better suit our patients' needs,' says Dr Tanghetti.

'It allows us to perform minimally aggressive or very aggressive treatments depending on the patient's wants and tolerance for downtime. More of my patients want a non-aggressive therapy and to go back to work the next day, and the CoolPeel's high-peak low-energy H-pulse mode is ideal for achieving rejuvenation with low downtime. With the H-mode setting, I can do things I couldn't do before in a less aggressive procedure.'

### UNIQUE PULSE-SHAPE DESIGN AND SPRAY EMISSION

The core of DEKA's SmartXide Punto laser is its pulse-shape (PSD) technology, offering variable pulse shapes, duration, energy and peak powers to allow practitioners to precisely balance thermal effects and ablation.

'SmartXide offers a wide range of spot density options and pulse shapes for improved ablative selectiveness, which enables the user to match the ideal treatment to the necessary downtime,' Dr Tanghetti explains.

Additionally, the laser's innovative

"spray" emission operates in a random manner to produce a natural appearance to the skin immediately after treatment without the demarcation lines associated with traditional fractional resurfacing. The spray mode also minimises pattern overlap while maximising speed and comfort of treatment.

### COMBINATION TREATMENTS

CoolPeel can be used as a powerful standalone treatment, but can also be combined with other modalities, such as RF microneedling.

'RF microneedling combined with CoolPeel is an excellent treatment for skin laxity,' says Dr Tanghetti. 'By combining the two modalities, we can offer both a deeper treatment with the microneedling and more superficial treatment with CoolPeel to optimise results.'

With its unique pulse control and high peak power/low energy mode, CoolPeel is changing the game for CO<sub>2</sub> treatments – offering a new way to deliver the benefits of a traditional fractional CO<sub>2</sub> skin resurfacing treatment without the associated lengthy downtime or treatment discomfort.

'CoolPeel enhances the laser market by offering a useful device that has both low downtime and traditional high downtime options, depending on the patient's needs. With its ability to also combine with other modalities such as RF microneedling, CoolPeel is a very useful and attractive tool in the marketplace today,' Dr Tanghetti concludes. **AMP**

SmartXide Punto CoolPeel is distributed in Australia by High Tech Medical. Call 1300 309 233 or visit [hightechmedical.com.au](http://hightechmedical.com.au)