



#### What is the Dermapen?

The **Dermapen** is an automated-micro needling therapy system that vertically pierces the skin to naturally stimulate collagen and elastin with minimal epidermal damage. This enhances rejuvenation results and is far safer for the client because there is much less epidermal damage.

The **Dermapen's** automatic vibrating function increases the effectiveness of treatment by increasing absorption of products, while reducing pain and discomfort.

The **Dermapen** is just as effective and can be used in combination with fractional lasers, IPL, and chemical peels.



# DERMALS® PEN Advantage

- No cross infection disposable needles
- Speed faster than manual applications
- Shorter treatment times
- Adjustable needle depth
- Less pain
- Lightweight hand-piece
- Easy to use
- Lower price of consumables
- No side effects
- User independent



## **DERMALS PEN** Application and Effect

- Skin tightening, lifting and rejuvenation
- Improves acne scars and wound healing
- Improves wrinkles and fine lines
- Minimizes pore size
- Improves stretch marks
- Treats and improves alopecia



## How DERMALS PEN Works

Injury

Stopping bleeding



Inflammation



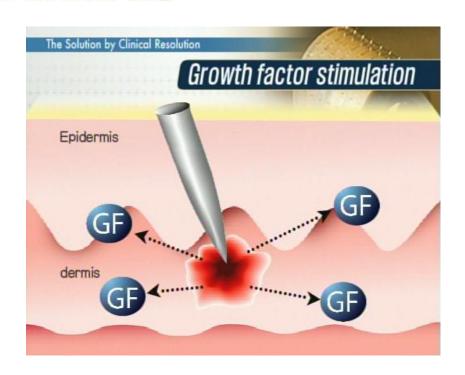
Growth factors emission

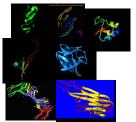


Fibroblast cell multiplication



Collagen and elastin synthesis



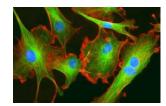


**Growth factor** emission





Collagen induction



Fibroblast proliferation

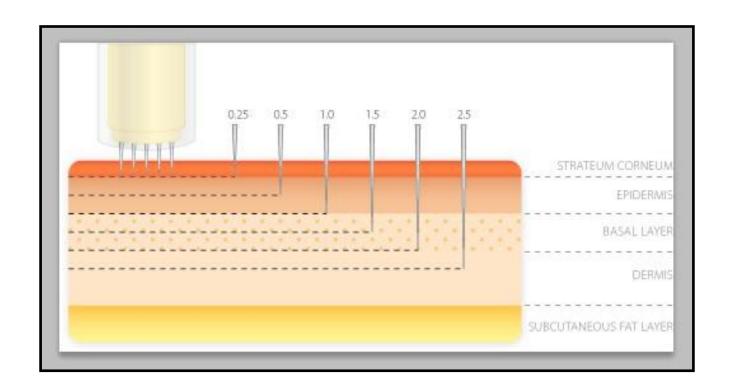
#### The Three Phase Mechanism of Action



COLLAGEN III ---- COLLAGEN I

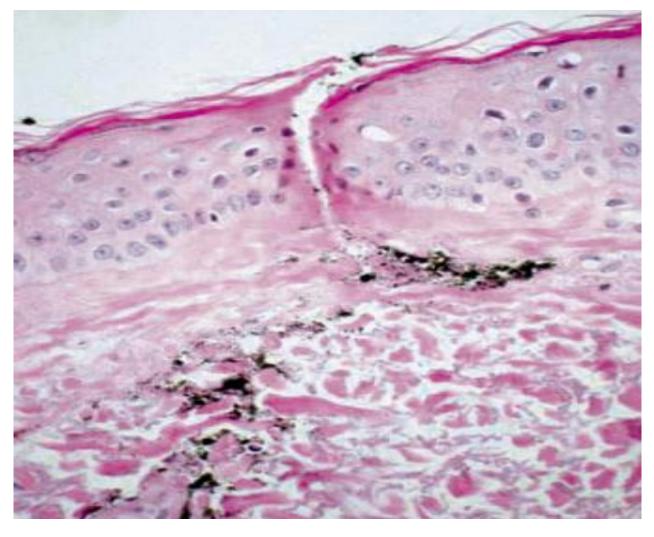
## Micro Needling Depth Chart

Dermapen technology allows unrivaled diversity with a disposable tip that can penetrate from .25mm to 2.5mm during the same treatment

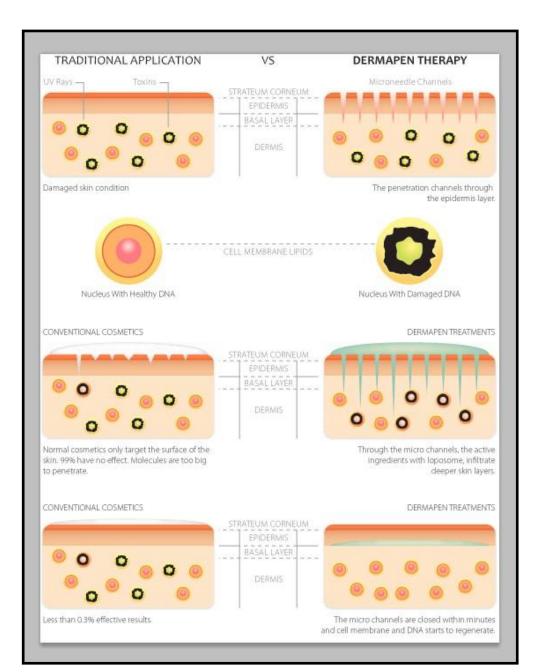


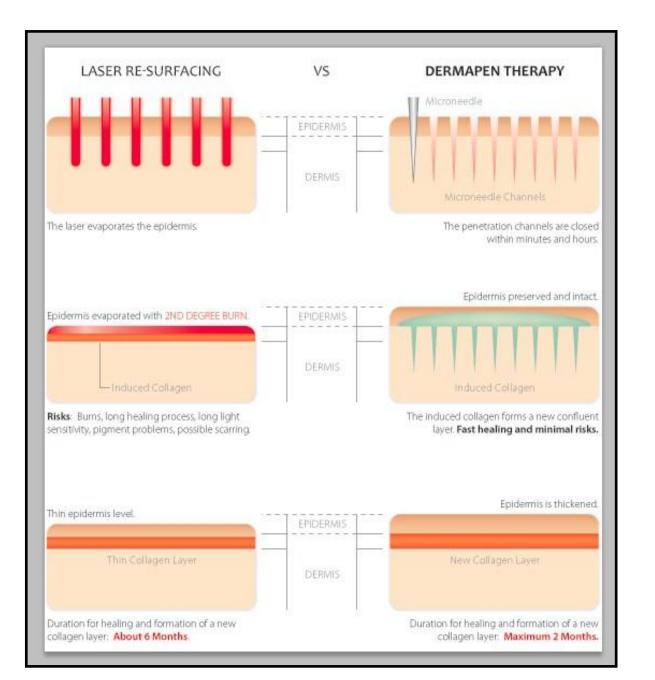
#### Micro needling and drug/topical delivery

Micro channels are created for topical absorption



Fernandes D. Oral Maxillofacial Surg Clin N Am 2005;17:51-63. Skin surface coated with Indian ink after needling



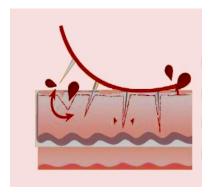


## Rolling Methods vs DERMALSPEN Therapy



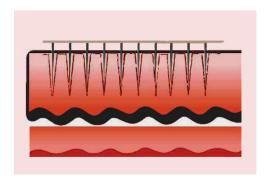


Rolling methods create unnecessary trauma, are user dependent, risk cross-infection, involve high consumable costs, are too large for small areas and display an undesirable perceived value.





Dermapen's automated vertical stamping method uses a universal, sterilized and disposable tip providing low consumable costs. The small tip helps treat hard to reach areas, delivers unrivaled collagen induction with 7 speed variability and reduces epidermal damage to limit down-time.



#### How the Patient Looks After Treatment

There is immediate redness that may last 12 to 24 hours





Pre-treatment

Immediately after full face treatment

Keloid scar





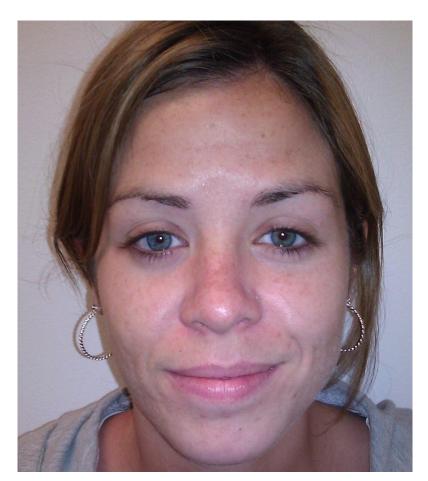


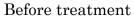
Before

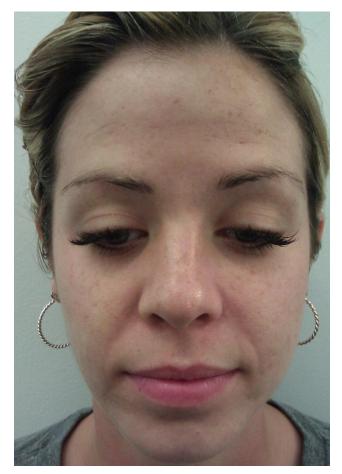
Immediately after

4 Weeks after

#### Improved skin tone







After 3 treatments 12 weeks, clear and even skin tone

Stretch marks



During first treatment (patient's right side treated, left side untreated)

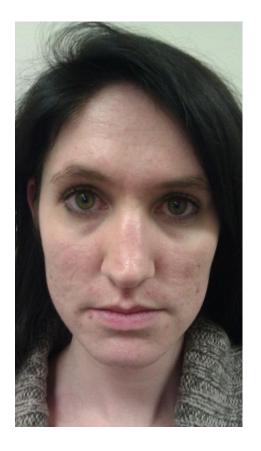
Dermapen used with other skin tightening lasers Improved aging spots, fine lines (under the eyes and mouth) and overall tightening



5 weeks after one treatment, YAG and EMAX fractional and Dermapen treatment

Active acne and scarring





Pre-treatment

6 days after first treatment

Improves acne scars





Before After

(5 sessions, every 4 weeks.)

Improves acne scars and minimizes pore size





Before After

(5 sessions, every 4 weeks.)

## Study On Burn Wound

## Management of hypertrophic scar after burn wound using micro needling procedure

Sang kayo Kim, M. D., Jon mo Park, M. D., Young ho Jang, M. D., Yong hon. Son, M. D., Jib young Bae<sup>1)</sup>, Chang so Lee<sup>2) -</sup> Green burn hospital, Diego

Purpose: Hypertrophic scars after burn wound management remains a difficult problem for many burn surgeons despite of new treatment option is developed. Microneedling procedure is new modality on scar management in our burn center. It breaks the scar tissue which consists of dense collagen fibers and rearranges. Microneedling is stamp shaped and it contains 2.1 mm length multiple stainless steel needles.

Method: 5 patients(4:adult.1:child) were selected and received micro needling 8 to 12 times every 2 weeks with or without Triamcinolone injection. The scar was passed by the micro needling 3 to 4 times making 200 to 300 holes on the scar area(cm). Skin biopsy was done every 4 times after needling. Two adult patient received micro needling under local anesthesia and other three patients received it under volatile induction anesthesia. Hypertrophic scar is estimated Vancouber Scar Scale (VSS) score and scar depth evaluation using Sonography and pathologic report.

Result: Clinically improvement was shown that VSS score were noted and scar height was thinning on Sonography at 4 patients. (3 adult and child). Pathologic report reveal collagen fiber was rearranged and even distributed with regular parallel on all patients.

#### Burn Wound





Received micro needling 8 to 12 times every 2 weeks with or without Triamcinolone injection. The scar was passed by the micro needling 3 to 4 times during each treatment and it makes 200 to 300 holes on the scar area(cm). Skin biopsy was done every 4 times after needling. Result: Clinically improvement was shown that VSS score were noted and scar height was thinning on Sonography. Pathologic report reveal collagen fiber was rearranged and even distributed.

#### Burn wound



Before treatment



Month 2

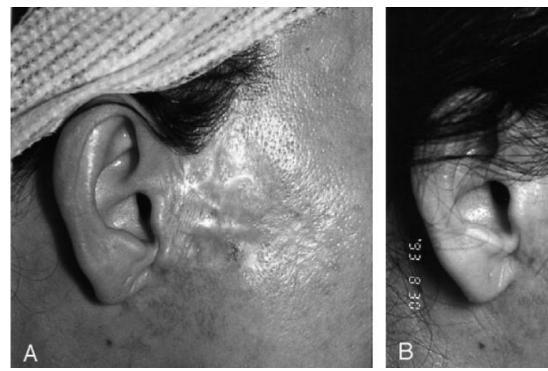


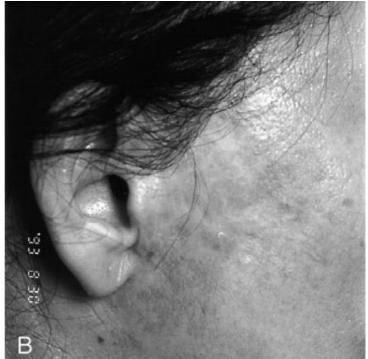
Month 3



Month 4

Surgical scar





Camirand and Doucet, Aesthetic Plast Surg 1997;21:48-51 Micro needling Study

#### Breast augmentation scar

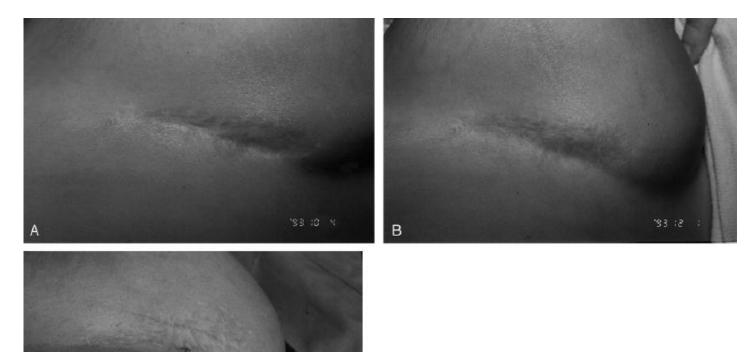


Fig. 5. (A) Breast augmentation scar seen following chronic purulent discharge had healed. (B) Two months after needle dermabrasion. (C) Six months after needle dermabrasion.

Camirand and Doucet, Aesthetic Plast Surg 1997;21:48-51 Micro needling Study

#### Lip wrinkles



Results may vary. Treatments at 1.0mm or greater

#### **Testimonials**

#### **MEDICAL SPA**

"I have a specific client, Mallory, that came into our clinic with noticeably deep acne scarring on her checks. We tried 3 deep skin resurfacing treatments with the Erbium YAG laser, one deep skin resurfacing with the CO2 laser and multiple treatments of aggressive peels. Those are just the treatments our clinic has performed on her. She has had multiple treatments at other clinics, I am just unaware of details of those treatments. After all of that, she still had noticeable deep scarring. I knew if anyone was going to see any results with the Dermapen, I wanted it to be Mallory.

I was happy she was willing to come in and let me try the treatment on her. After just one treatment she was calling me asking when she could be treated again. After all of the treatments she has done in the past, all it took was one treatment for her to see a difference. It was amazing to me. After 4 treatments, I will say I can still see mild acne scars, but I am confident that with a few more treatments Mallory will continue to be even more satisfied, as will I.

It has been amazing to do a treatment and send a client away not worried about what they are going to look like the next day or when they will call you asking questions if what they are going through is normal or not. Mallory has been so pleased to do the treatment and go back to regular life, no down time, no time off work, no looking scary (all the things we hate to worry about!)

I am excited to start offering the Dermapen to the clients of our clinic and continue to improve the way people feel about the way they look! Thanks, Dermapen!"

Kylene M. - Master Aesthetician and Spa Director

Employee at Elase Medical Spa - Salt Lake City, Utah

#### COSMETIC DERMATOLOGY

I believe the Dermapen to be an excellent addition to any dermatological or aesthetic medical practice. Micro-needling is an established treatment modality with known benefits. The unique Dermapen automatic micro-needling device adds new versatility with adjustable needling depth, treatment intensity, increased efficiency and the option to focus treatments on troubled areas. The device may also enhance the delivery of medical and cosemeceutical products to a more effective level in the skin. I see the Dermapen as a primary or adjunctive treatment for skin rejuventation, scars, skin texture, fine wrinkles, and abnormal pigmentation. I also believe the Dermapen will potentially improve the outcome of many of my laser procedures. I have personally experienced the benefits of the Dermapen.

Mark B. Taylor, MD

Owner of Gateway Aesthetic Institute & Laser Center - Salt Lake City, Utah

#### PLASTIC SURGERY

I had this treatment done last week and it was great!! Very minimal pain and discomfort. My skin felt incredible after, it looked and felt tighter and the tone was noticeably more even all over. I love how, depending on your skin concerns, you can put specific serums on and the Dermapen penetrates the product into different layers of the epidermis and dermis getting the ultimate efficacy of the product. Loved it!! Can't wait for my next treatment!

Amelia M. - Master Aesthetician / Admin

**Employee at Utah Eye and Facial Plastic Surgery** 

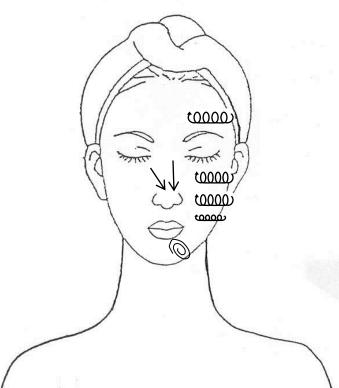
## How to Operate

- Plug in adaptor to the hand piece
- Put sterilized needle into the top of the hand piece
- Choose needle depth
  (Adjust the depth of needle by turning the adjustment ring)
- Turn on speed level ring (Face 1~4, Body 5~7)
- Begin treatment

#### Order of Treatment

- Clean face
- Apply numbing cream to treatment area and leave on for 30 minutes
- Remove numbing cream thoroughly
- Apply antiseptic wipe to treatment area
- Apply hyaluron product to treatment area
- Begin treatment

#### Treatment



- 1. Divide the face into five parts: forehead, left and right cheeks, nose, upper lip and chin
- 2. Apply hyaluronic/topical on the area to be treated
- 3. Make three passes to each area vertical, horizontal and small circles
- 4. After treating each section, wipe any bleeding
- 5. Treat the other areas as described above, steps 2 through 4
- 6. After the entire face is treated, cover with a cooling mask if desired

## **DERMALS PEN**

#### Speed

· Level 1. :  $25\sim30$ Time/ sec

· Level 2. :  $35\sim40$ Time/ sec

· Level 3. :  $45\sim50$ Time/ sec

· Level  $4.:55\sim60$ Time/ sec

· Level 5. :  $65 \sim 70$ Time/ sec

· Level 6. :  $75\sim80$ Time/ sec

· Level 7.: 85~90Time/ sec

DEPTH	SPEED
under 0.5mm	1 ~ 2
0.5 - 0.75mm	2~3
0.75 - 1.25mm	3 ~4
1.25 - 1.5mm	4 ~ 5
1.5 - 2.5mm	6 ~ 7

#### Depth

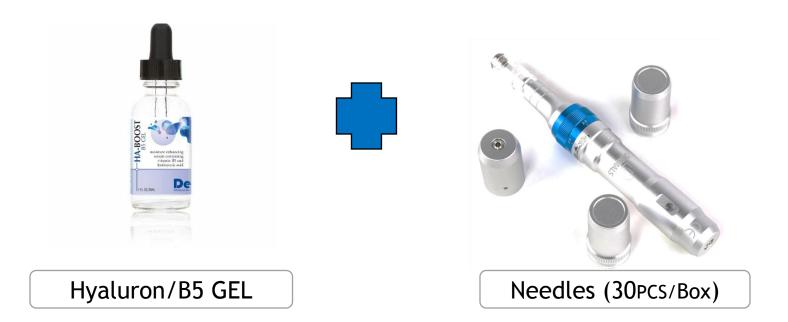
REGION	THIN SKIN	THICK SKIN
Forehead	0.25 - 0.5mm	0.5 – 0.75mm
Between Eyebrow	0.25 - 0.5mm	0.5 – 1.0mm
Nose	0.25mm	0.5mm
Eye Area	0.25mm	0.25 – 0.5mm
Cheek Bone	0.5mm	0.5 – 1.0mm
Cheek and Chin	0.5 – 1.0mm	1.0 - 2.0mm
Upper Lip	0.25mm	0.25 – 0.75mm
Facial Scarring	1.0 - 1.25mm	1.5 – 2.0mm
Stretch Mark	1.5 - 2.0mm	1.5 - 2.0mm
Surgical & Burn Scars	2.0 – 2.5mm	

## **DERMALS PEN** ®

Fractional Micro Needle System



#### HA-BOOST and Consumables



HA-BOOST prevents the appearance of aging and the look of fine lines and wrinkles by hydrating and stimulating collagen and elastin formation.

## Specifications

Name	Dermalspen
Function	FRACTIONAL MICRO NEEDLING DEVICE
Input power	5V=1000mA, 12VA
Adapter	AC100~240V, 50-60Hz
Dimensions	Hand piece 20*20*140 (mm)
Weight	Total /555g, Hand piece/82g
Depth	0.25, 0.5, 1.0, 1.5, 2.0, 2.5(mm)